

2021 COVID 19 Student Evaluation Report

Each year, the pre and post survey items are reviewed and revised to address the current event’s learning objectives and activities. Student data from the previous year are also considered. There were two open-ended questions in the post survey. The questions were: 1) What were the most compelling issues for you? and 2) How would you improve the COVID 19 event? The responses are in a separate document. (Special thanks to Emilee Greer, CTIPH intern who coded student comments)

The following slide provides an overview of the types of items.

2021 COVID 19 Questionnaire (# of Items)

<u>PRE: Questions</u>	<u>POST: Questions</u>
<ul style="list-style-type: none"> • Interprofessional Roles = 12 • Education: academic program, year 	<ul style="list-style-type: none"> • Event: Question = 1 • Activity: usefulness = 2, retrospective = 6, effectiveness = 2, small group discussion = 4, commitment to profession = 1, overall rating = 1, • Interprofessional Teamwork = 23 • Demographic: age, gender, ethnicity, military service • Education: institution, academic program, year • IPE: experience, activity

Pre-Survey Results

Academic Program in Pre and Post Survey. The list of programs was not the same. Needs to be revised for 2022.

Pre N = 673

Post N = 625

Academic Program	Pre-Student Frequency	Pre-Percentage		Post-Student Frequency	Post-Percentage
BSN/BSN-IH	87	13%		85	14%
MEPN	124	18%		126	20%
MD	108	16%		82 + 1	13%
MD/MPH	-	-		12	2%
PharmD	119	18%		114	18%
Athletic Training	-	-		4	.6%
Dental Hygiene	-	-		1	.2%

Public Health, BS	9	1%		8	1%
MPH	82	12%		71	11%
Nutritional Sciences	81	12%		76	12%
Occupational Therapy	42	6%		40	6%
Recreational Therapy	1	.1/0%		0	0
Social Work	1	.1/0%		0	0
Other (See below list)	19	3%		3	.5%
Athletic Training MS	11			See above	
MPH	1	See above			
MD/MPH	4				
Social Psychol PhD	1			1	
NAU MSAT				1	

The MD/MPH option was not listed in the pre-survey. The Athletic Training option was listed in the post-survey.

Questions (Table 1):

Select the profession(s) that you think should be responsible for the following activities. You may select multiple professions.

For each column, the five professions that were selected most often are **bolded**

Table 1

Profession (Students can select more than one profession) Total N = 674	Establish emergency preparedness guidelines for your institution or community	Educate the public on how to prevent the spread of COVID 19 or other infectious disease	Interpret scientific and evidence- based recommendations
Journalism	142	395	198
Law	319	195	207
Medicine	546	584	618
Nursing	438	531	492
Nutritional Sciences/Dieticians	185	282	341
Occupational Therapy	142	227	294
Pharmacy	341	418	484
Physical Therapy	128	212	309
Physician Assistant	276	424	457
Public Health	579	599	507
Social Work	320	349	246
Recreational Therapy	102	191	198
Emergency Medicine, B.S.	443	NA	NA

Activity/Role: Establish emergency preparedness guidelines for your institution or community.

- Public Health was selected most often and closely followed by Medicine. They were followed by Emergency Medicine and Nursing.
- Recreational Therapy, Physical Therapy, Occupational Therapy, and Journalism were selected least often.

Activity/Role: Educate the public on how to prevent the spread of COVID 19 or other infectious disease

- Public Health was selected most often and closely followed by Medicine. They were followed by Nursing, Physician Assistant and Pharmacy.
- Law and Recreational Therapy were selected least often.

Activity/Role: Interpret scientific and evidence-based recommendations

- Medicine was selected most often. It was followed by Public Health, Nursing, Pharmacy, and Physician Assistant.
- Journalism and Recreational Therapy were selected least often.

Questions (Table 2):

Select the profession(s) that you think should be responsible for the following activities. You may select more than one.

For each row, the three professions that were selected most often are **bolded**. For the last two activities (rows), four professions are bolded because the frequency count between the third and fourth professions were very close.

Table 2

Profession N = 674	Jour	Law	Med	Nurs	Phar	PH	Soc Wk
Conduct regular media briefings to provide updates and respond to misinformation or false claims	481	192	425	198	172	513	145
Evaluate policies addressing a set of procedures that protect the safety of healthcare and essential workers	82	466	455	318	250	495	195
Establish early warning systems to identify disease clusters	91	88	456	268	193	568	127
Investigate suspected or confirmed disease clusters	118	71	439	216	160	555	101
Administer Points-of-Dispensing (PODs) to provide vaccine, antibiotics, antiviral medications	36	65	511	440	488	433	147
Develop plans on how to implement the isolation of patients and quarantine of their contacts	44	169	530	389	211	544	220
Develop a list of essential services that impact the health of the community: water, power,	158	239	234	174	127	581	390

Profession N = 674	Jour	Law	Med	Nurs	Phar	PH	Soc Wk
telecommunications, transportation systems, etc.							
Provide social, psychological support to affected individuals, families and communities	122	120	357	358	187	441	579

Question (Table 3):

Evaluate patient treatment priorities when resources are limited

The four professions that selected most often are **bolded** (column).

Table 3

Profession N = 674	Evaluate patient treatment priorities when resources are limited
Journalism	27
Law	90
Medicine	604
Nursing	498
Pharmacy	384
Public Health	421
Social Work	219
Physical Therapy	186
Occupational Therapy	182
Recreational Therapy	144
Physician Assistant	343

- Medicine was selected most often followed by Nursing, Public Health, Pharmacy, Physician Assistant, and Social Work.
- Of the therapies, Recreational Therapy was selected least often compared to Physical Therapy and Occupational Therapy.
- Law and Journalism were selected the least often.

Post Survey Questions

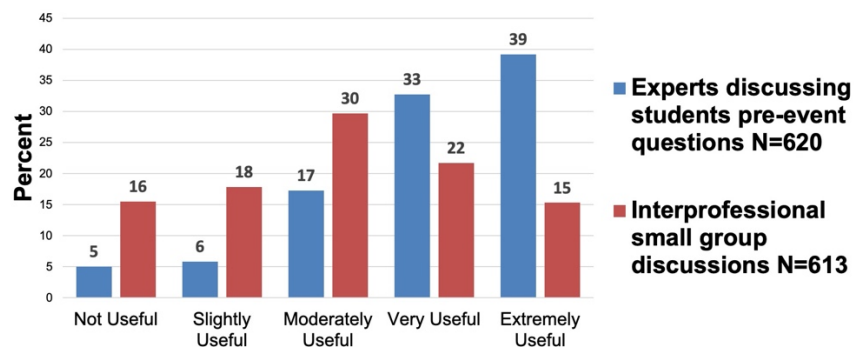
Which event did you attend? N = 552 (More than 50 students did not identify their session time)

10:00 am 297 students
2:00 pm 255 students

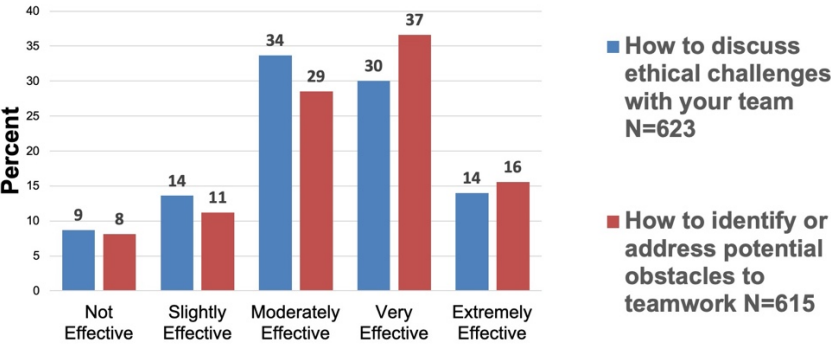
Summary of the Event (next 7 slides)

- Students found the discussion with the experts more useful than the interprofessional small group discussions.
- The exercise was slightly more effective in teaching students how to identify or address potential obstacles to teamwork than to discuss ethical challenges with their team.
- The small group discussion influenced student opinions about a) prioritizing patients for treatments and b) reporting to work more than self-isolation and quarantine. To a lesser degree it influenced student opinions about c) self-isolation and quarantine and d) reopening of schools.
- Commitment to their chosen profession did not change for 30% of the students; another 30% reported a significant change; and 39% reported only a slight to moderate change. Responses showed a wider spread compared to other items.
- Overall, 59% of students rated the event positively. Twenty five percent of the students gave it an average rating with the remaining 16% rating it poor to fair.
 - The 10:00 am and 12:00 pm session had similar ratings but the number of students who identified their session was much lower overall.

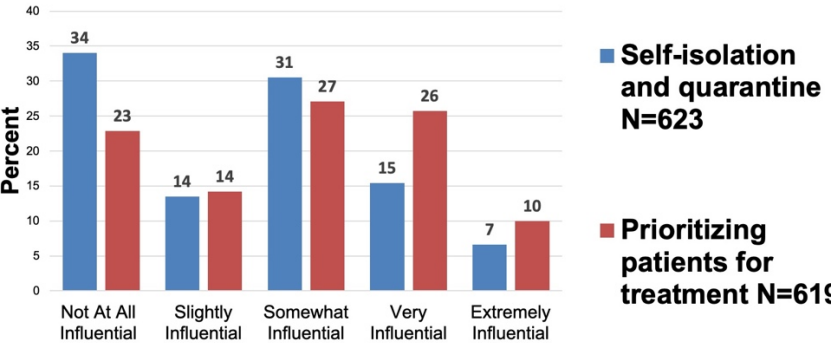
How useful were the following activities



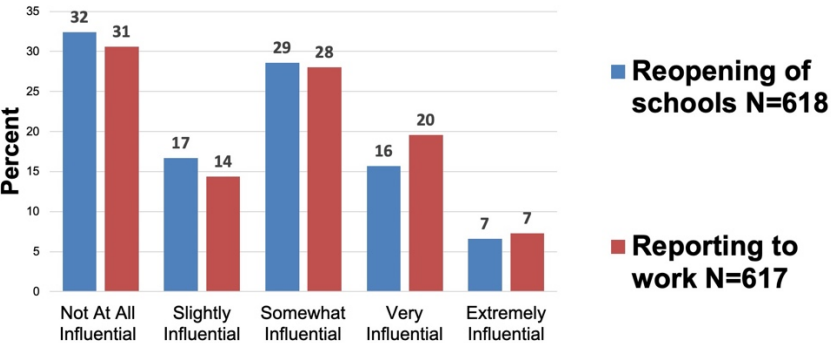
Rate how effectively the exercise taught you the following



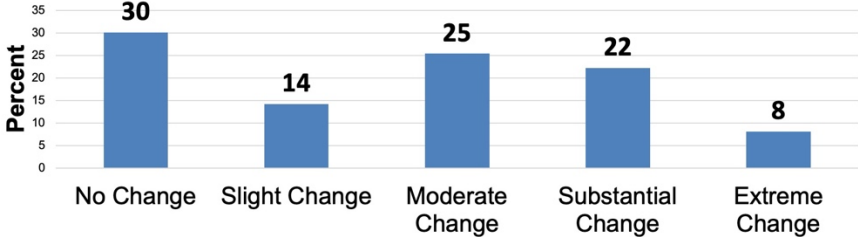
To what degree did the small group discussion influence your professional opinions about



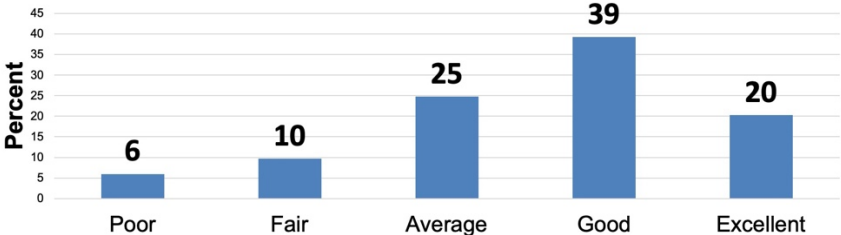
To what degree did the small group discussion influence your professional opinions about



To what degree has our commitment to your chosen profession changed as a result of the impact of COVID-19 on your personal life (not this event)? N=621

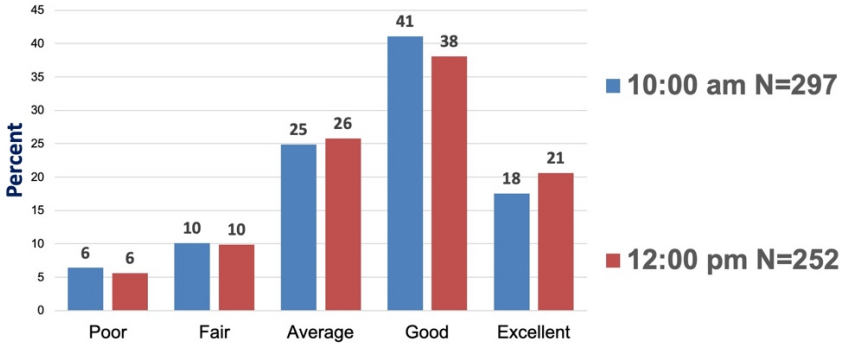


Overall, how would you rate the pandemic Flu IPE N=617



Note: Not all students identified their session time (next slide).

Overall, how would you rate the pandemic Flu IPE

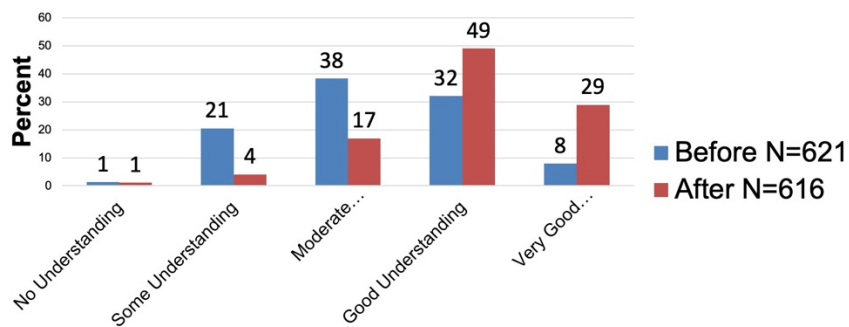


Retrospective Pre-Post Questions

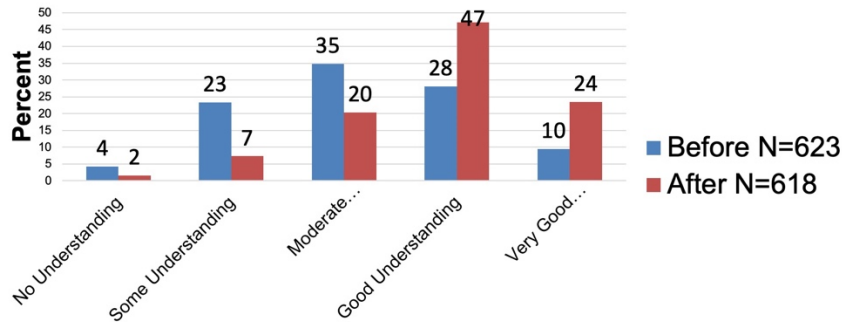
1. My understanding of the roles **other** professions play in a disease pandemic
2. My understanding of how public health decisions are made
3. I feel prepared to talk with patients about COVID vaccine misconceptions
4. In a pandemic, public health requirements should override individual rights
5. If someone had COVID-19, it should be enough to satisfy mandate requirements
6. Disagreements about COVID vaccines make teamwork more difficult

The first three questions address knowledge or skill

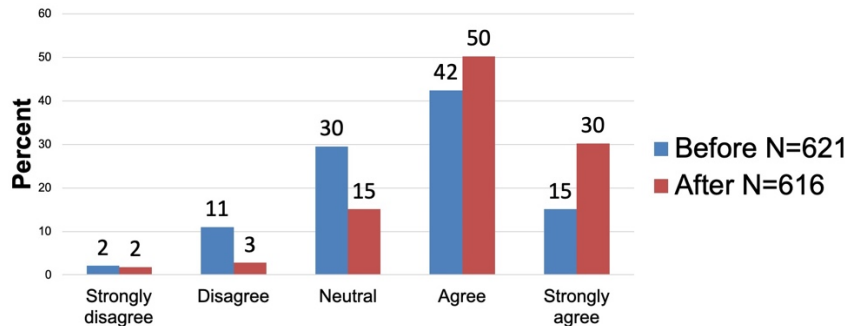
My understanding of the roles **OTHER** professions play in a disease pandemic



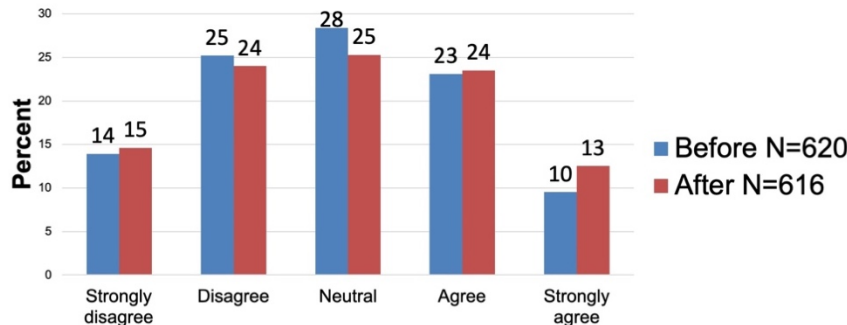
My understanding of how public health decisions are made



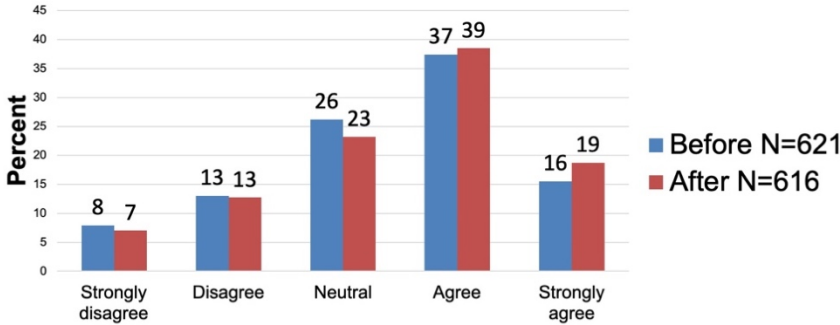
I feel prepared to talk with patients about COVID vaccine misconceptions



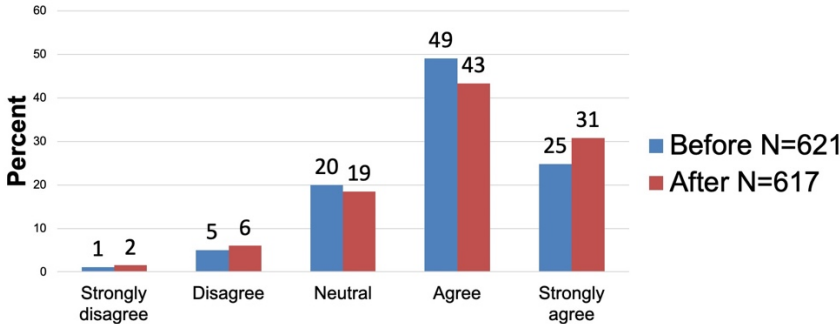
If someone had COVID-19, it should be enough to satisfy mandate requirements



In a pandemic, public health requirements should override individual rights



Disagreements about COVID vaccines make teamwork more difficult



Retrospective Before and After Activity Student Means

The questions are organized from the largest mean difference to the smallest mean difference. Before and After crosstabs were calculated to identify the percentage of students who gave the same response for each item (not shown in the table).

Table 4

Question/Item (Values of 1 to 5)	N	Pre Mean	Post Mean	Mean Difference	t	Sig (2-tailed)
1. My understanding of the roles OTHER professions play in a disease pandemic (No Understanding to Very Good Understanding)	615	3.24	4.00	-.763	-22.830	<.001
2. My understanding of how public health decisions are made (No Understanding to Very Good Understanding)	618	3.14	3.84	-.693	-20.036	<.001
3. I feel prepared to talk with patients about COVID vaccine misconceptions (SD to SA)	616	3.57	4.04	-.468	-16.309	<.001
4. In a pandemic, public health requirements should override individual rights (SD to SA)	616	3.39	3.49	-.099	-4.506	<.001
5. If someone had COVID-19, it should be enough to satisfy mandate requirements (SD to SA)	616	2.89	2.95	-.063	-3.549	<.001
6. Disagreements about COVID vaccines make teamwork more difficult (SD to SA)	617	3.91	3.96	-.047	-2.082	.038

Table 4


All items were significant which is not surprising after an educational activity. The mean difference is an indication of the degree of change.

- Items 1 and 2 had the biggest mean change.
- Items 1,2, and 3 address knowledge and skills that can be influenced by an educational activity. For item 3, students felt more prepared after the activity.
- Items 4, 5, and 6 address attitudes or opinions which are typically harder to influence after one brief activity.
- Item 5 had pre and post means that stayed in the middle. The mean difference is small but still significant. The frequency distribution show that this activity did not change student opinion as a group.
- Item 6 had a pre mean that was the highest among all items at the beginning. The mean difference was the smallest. Students expected disagreement would make teamwork more difficult before the activity and there was little change after the activity. This item is an opinion about the vaccine which should be based on fact, but the data reflects it is not.

Crosstabs were calculated to identify the percentage of students who chose the same response for the Before and After. The higher percentages show how many students felt the same way before and after the activity. Items 4, 5 and 6 are particularly difficult issues to address in a brief, one-time activity. The lower percentages show that the activity had a bigger impact on student learning versus student opinions.

- Item 5 (85%): Satisfying mandate requirements
- Item 4 (80%): Public health requirements and individual rights
- Item 6 (79%): Impact of disagreements about vaccines on teamwork
- Item 3 (61%): Prepared to talk about COVID vaccine misconceptions
- Item 2 (49%): Understanding of how public health decisions are made
- Item 1 (43%): Understanding of other professional roles

Interprofessional Teamwork Scale (AHSC-ITS)



The AHSC-ITS Scale consists of 23 items that integrates IPAS questions with items developed at the UArizona based on prior interprofessional evaluations.

Interprofessional Teamwork Scale Items

The percentage of students who selected *agree and strongly agree* were the highest for five items. The percentage ranged from 93% to 95%. The items focused on patient care, communication, and respect for diversity.

- Establishing trust with my patients is important to me (95%)
- It is important for health professionals to understand what it takes to effectively communicate across cultures (95%)
- It is important for health professionals to respect the unique cultures, values, roles/responsibilities, and expertise of other health professions (94%)
- It is important to communicate compassion to my patients (94%)
- It is important for health professionals to work on projects to promote community and public health (93%)

The percentage of students who selected *agree and strongly agree* ranged from 74% to 86% for 10 items. The items focused on teamwork skills, attitudes toward other professions, clinical problem solving, and disruptive behaviors.

- Help me become a better team worker (86%)
- Help me become a more effective member of a health care team (86%)
- Improve communication among doctors, nurses, pharmacists, and other health care providers (85%)
- Help me think positively about other professionals (84%)
- Prejudices and assumptions about health professionals from other disciplines get in the way of delivery of health care (83%)
- Change negative stereotypes about other professions (82%)
- Maximize the contributions of each team member (82%)
- Increase my ability to understand clinical problems (82%)
- Increase shared team responsibility when errors are made (79%)
- Decrease disruptive behaviors within teams (74%)

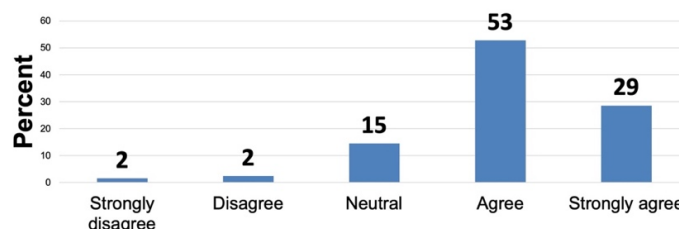
The percentage of students who selected *agree and strongly agreed* were lower for 5 items. Their responses were also more neutral. (Slides have a **bold** border)

- Increase job satisfaction among health care providers (74% agreed) and neutral (21%)
- Prevent provider and staff burnout (69% agreed) and were neutral (24%)
- Lower costs of care for patients (60%) and neutral (29%)
- Health professionals/students from other disciplines have prejudices or make assumptions about me because of the discipline I am studying (51%) and neutral (26%)
- I have prejudices or make assumptions about health professionals/students from other disciplines (50% disagree and strongly disagree) and neutral (21%)

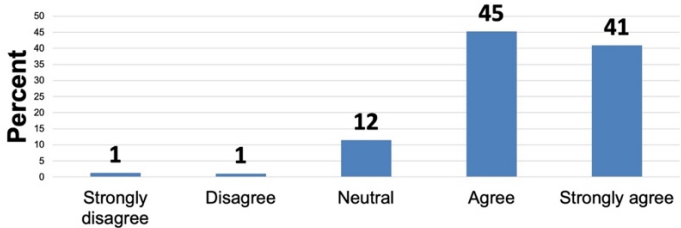
Three items addressed the importance of working with other professionals. The percentage of students who selected *agree and strongly agree* felt it was important for health professionals to work with a) public health administrators and policy makers (93%), b) legislators (91%) and c) non-clinicians (87%).

Shared learning experiences with other health profession students will (following 12 items)

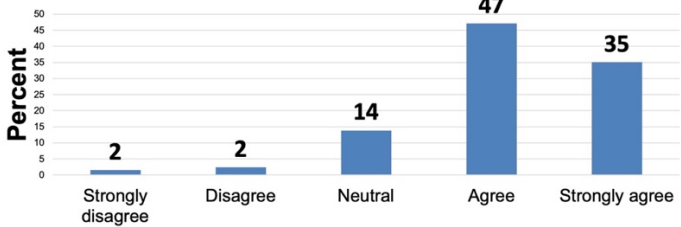
Change negative stereotypes about other professions N=619



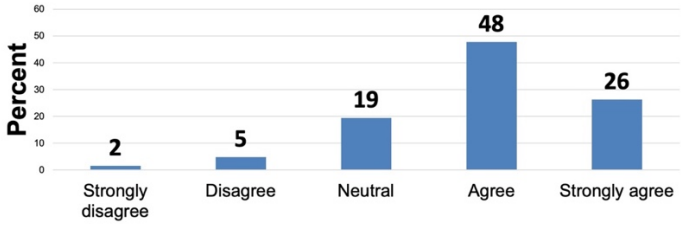
Help me become a better team worker N=618



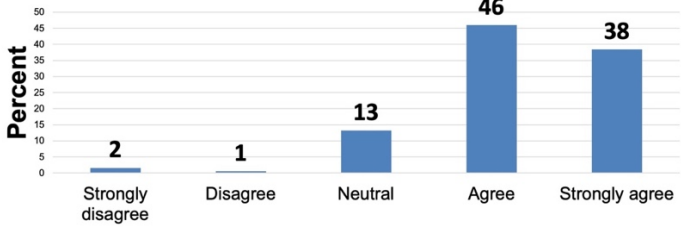
Maximize the contributions of each team member N=618



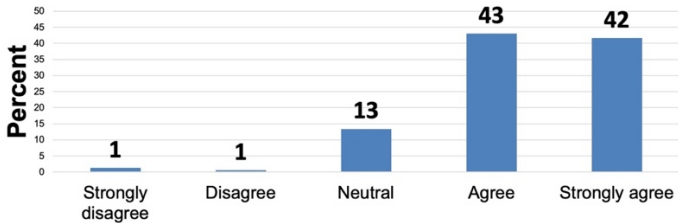
Decrease disruptive behaviors within teams N=619



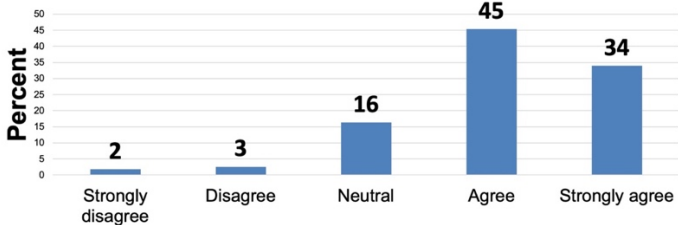
Help me think positively about other professionals N=619



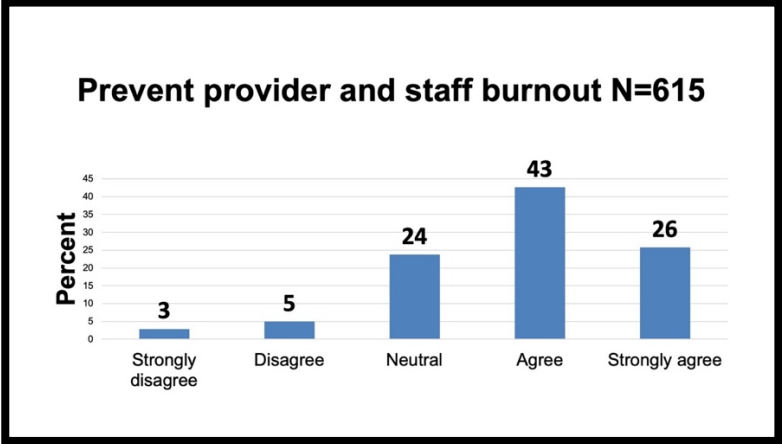
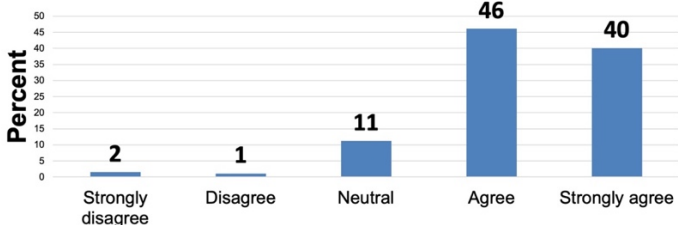
Improve communication among doctors, nurses, pharmacists, and other health care providers N=619



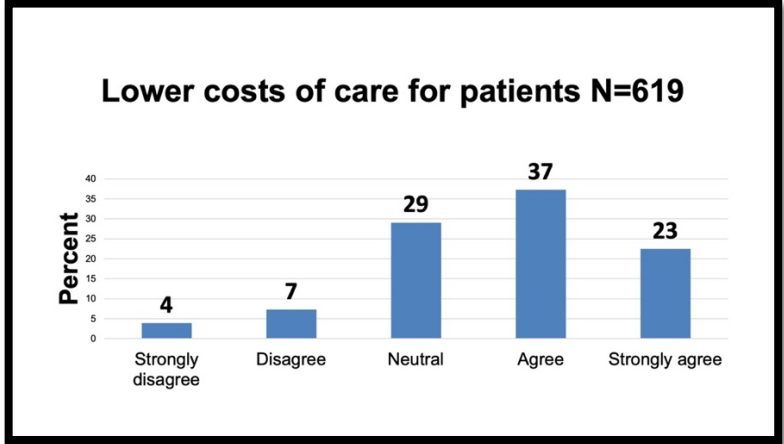
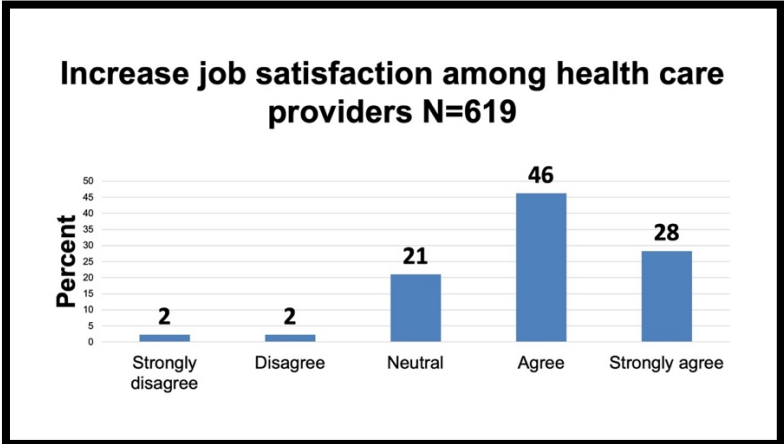
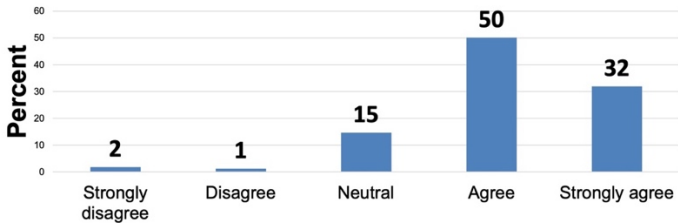
Increase shared team responsibility when errors are made N=619

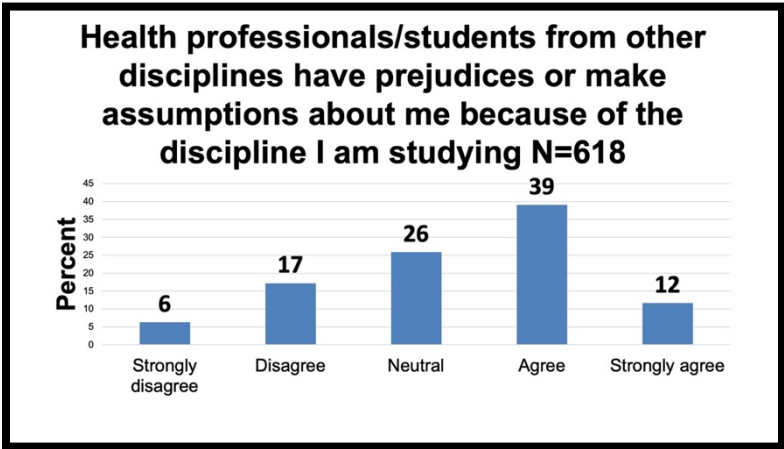


Help me become a more effective member of a health care team N=616

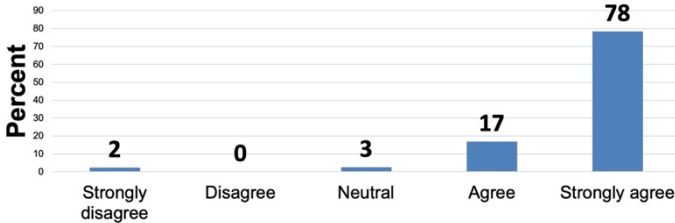


Increase my ability to understand clinical problems N=619

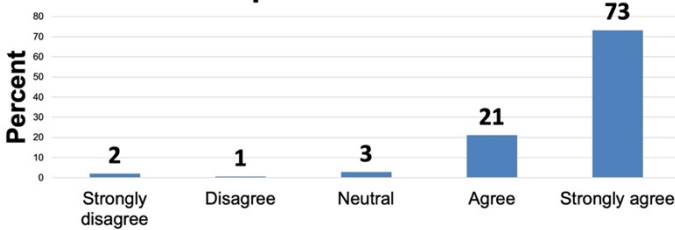




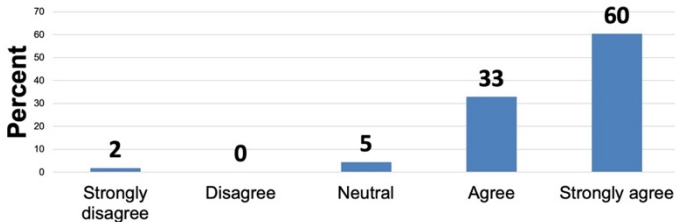
Establishing trust with my patients is important to me N=617



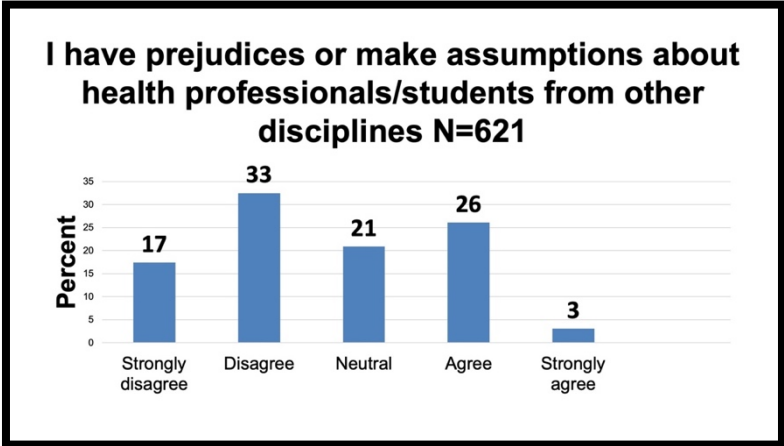
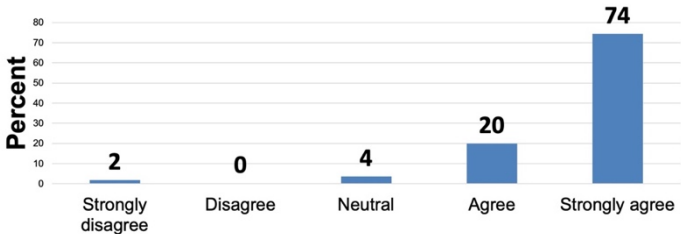
It is important for health professionals to respect the unique cultures, values, roles/responsibilities, and expertise of other health professions N=617



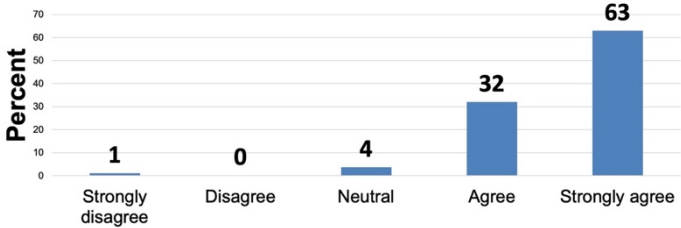
It is important for health professionals to work on projects to promote community and public health N=619



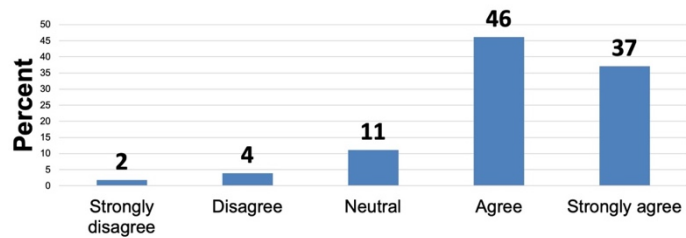
It is important for me to communicate compassion to my patients N=619



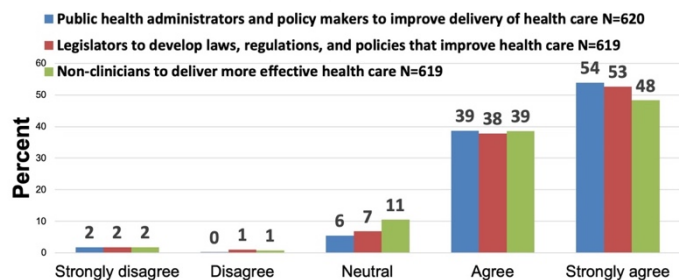
It is important for health professionals to understand what it takes to effectively communicate across cultures N=621



Prejudices and assumptions about health professionals from other disciplines get in the way of delivery of health care N=620



It is important for health professionals to work with



2021 Student Demographics Reported in Post Survey

Age Range	Post-Survey
19-29	510
30-39	75
40-49	21
50-59	6
n/a	1
Total	613

Gender	Post-Survey
Female	479
Male	128
Non-binary, not exclusively male or female	4
Transgender Male/Trans Man	0
Transgender Female/Trans Woman	0
Additional gender category you prefer	0
I don't want to say	8
Other:	
Total	619

Ethnicity N = 614

Hispanic or Latino = 150 (24%)

Non-Hispanic or Non-Latino = 464 (76%)

Military Service N = 615

No military service	603 (98%)
Current active duty	0
Current active reserve	6
Prior military service – veteran status	5
Retired non-combat	1

Institution: N=619

University of Arizona = 573 (93%)

Northern Arizona University = 46 (7%)

Arizona State University = 0

Year in degree program Pre N = 670, Post N = 621

Year	Frequency (%) Pre	Post Frequency (%) Post
One	162 (24%)	152 (25%)
Two	211 (31%)	187 (30%)
Three	125 (19%)	121 (20%)
Four	172(26%)	161 (26%)

Interprofessional Education Experience**Have you participated in any other interprofessional education (IPE) activities?****Post: N = 622**

Yes = 452students (73%)

No = 170 students (27%)

In what other interprofessional education (IPE) activity or activities did you previously participate? Select all that apply. UAHS = University of Arizona Health Sciences

Interprofessional Activity	Frequency
UAHS Pt Safety	160
UAHS Pandemic Flu	64 +1
UAHS Disabilities	195
UAHS CPR Team Behavior	144

UAHS CLARION Case Competition	4
UAHS Opioid	60
UA Milagro	7
UA Poverty Simulation	0
Interprofessional Rural Health Professions Conference	16
IPE activity at another institution	11
Other IPE at UArizona (see below list for activities identified by students who filled in this field)	136
IPE activity at another institution	20

Students may not remember the actual name of the activity. The following list identifies the OTHER IPE at UArizona. Topics were combined as much as possible.

- *Addressing Obesity Using a Weight-inclusive Model/ Obesity/Nutrition = 5*
- *Arizona Health Equity Conference = 2*
- *Arizona Summit = 3*
- *Communication and Communication one = 2*
- *Community Health Mentor Program = 1*
- *Covid = 1 (Added to Pandemic Flu)*
- *MNT workshop vis MedWise = 1*
- *First IPE event = 1*
- *Graduate IPE = 1*
- *I can't remember the name/ not sure = 2*
- *Interprofessional =2*
- *Interprofessionalism/Intro to Interprofessionalism = 47*
- *Interprofessional case study (through Capstone) = 1*
- *Interprofessional Communication/ Interprofessionalism & Communication = 2*
- *Interprofessional Education (IPE)= 2*
- *Interprofessional one in September = 1*
- *Interprofessional Team Behaviors = 1*
- *Intro/Intro to IPE/ IPE intro = 19,*
- *Introduction to professionalism = 3,*
- *Interprofessionalism for Patient Safety =2*
- *IPE Ethics = 1*
- *IPE for healthcare workers = 1*
- *IPE St. Luke's Home = 3*
- *MEPN University of Arizona = 1*
- *Naloxone Training = 1*
- *One Health = 1*
- *Previous semesters of pharmacy school = 1*
- *Previous year's IPE = 1*
- *Roles of different healthcare professionals = 1*
- *Social Justice Symposium = 1*
- *Team Collaboration = 1*
- *The online requirement training (2) = 1*