



## ONLINE IPE COMMUNICATION MODULE: IMPROVING STUDENTS' ATTITUDES TOWARD INTERPROFESSIONAL PRACTICE

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# Background

- ❑ The lack of communication between healthcare providers causes medical errors;
- ❑ 70% of these errors are due to a failure in interprofessional communication.
- ❑ One of the most effective interventions to prevent miscommunications is introducing students to interprofessional Practice (IPP)
- ❑ The IPE Communication Module (IPECM) developed by the University of Michigan uses different asynchronous methods to help students learn more about barriers to effective communication
- ❑ Using the IPECM for occupational therapy and public health students, Amini and Woodworth (2021) reported that students showed significant improvement in “communication and teamwork” and “interprofessional relationship,” but no significant change in interprofessional interaction and interprofessional learning.
- ❑ To improve the interprofessional interaction, we added:
  - ❑ a case study
  - ❑ some synchronous activities

# Method

## Assessment:

- ❑ Attitude toward IPE: the University of West England University (UWE) – Before and After
- ❑ Four different subdomains:
  - ❑ Communication and Teamwork (CTW),
  - ❑ Interprofessional Relationship (IPR),
  - ❑ Interprofessional Interaction (IPI),
  - ❑ Interprofessional Learning (IPL).

## Statistical analysis:

- ❑ the Wilcoxon Signed-Rank test to compare changes before and after taking the module.
- ❑ A decrease in the score was considered shifting toward a positive attitude in each subdomain.

# Results

- Attitude toward CTW, IPL, and IPR improved
- When we separated students by each profession,
  - OTD students showed the highest decrease in all subdomains, except IPL,
  - PA students reported the highest reduction in IPL.
  - Across all disciplines, RT students reported the smallest decline in all subdomains.

Table 1 Students participated in the Communication Module and Surveys, Fall 2021

	OTD	RT	PA	PH	Total
# of students	21	20	39	12	92
% of participants	27%	19%	46%	8%	100%
# participated	13	9	22	4	48
Response Rate	62%	45%	56%	33%	52.17%

Notes: OTD: Occupational Therapy; RT: Respiratory Therapy; PA: Physician Assistant; PH: Public Health

Table 2 Changes in scores before and after participating in Communication Module, Fall 2021

	Mean (Before)	Mean (After)	Difference	Sum-	Sum+	Critical Value	n	p
CTW	16.88	15.98	-0.9	-249	492	256	38	<0.05
IPL	11.25	12.58	1.33	-419	211	213	35	<0.05
IPI	32.85	32.85	0	-497	493	353	44	>0.05
IPR	14.65	13.35	-1.3	-288	573	302	41	<0.05

Notes: Wilcoxon Signed-Rank Test

CTW: Communication and Teamwork; IPL: Interprofessional Learning; IPI: Interprofessional Interaction; IPR: Interprofessional Relationships

# Discussion

- The IPECM improved students' attitudes toward interprofessional communication
- Compared to our last year's experience (Amini and Woodworth, 2021), adding physician assistant and respiratory therapy students to the module, also the case study, improved IPL.

## **Next Step:**

- We plan to revise the case and add more interactive and synchronous activities to the module.
- Next year, we also plan to add more interprofessional interaction and learning components to the IPECM.