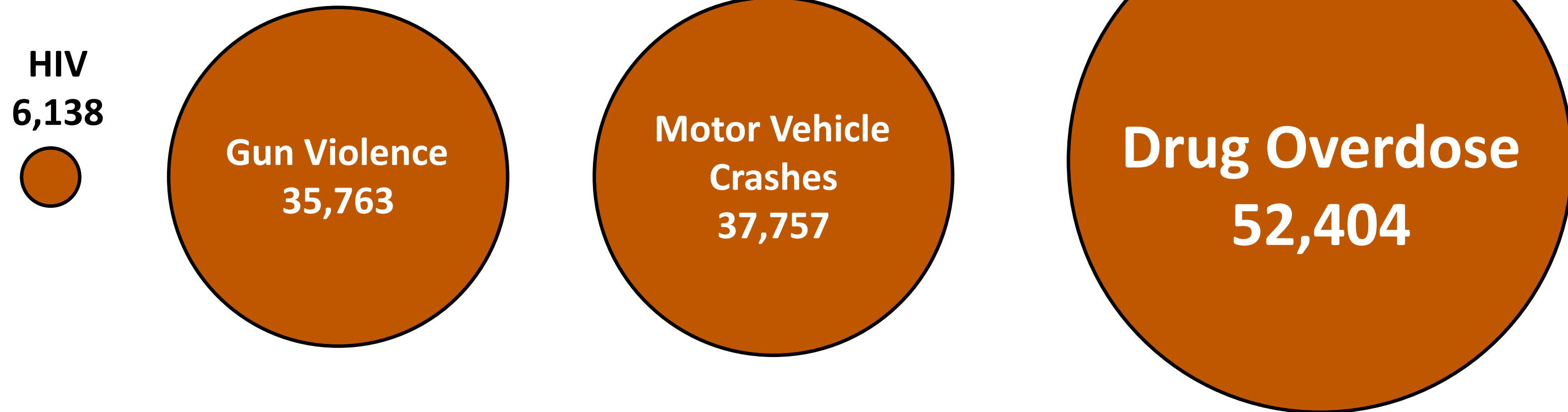


Operation Naloxone: Multi-Institutional Opioid Overdose Prevention Service Learning For Health Professions Students

Lubna Mazin; Lucas G. Hill, PharmD; Kirk E. Evoy, PharmD; Kenneth A. Lawson, PhD

BACKGROUND

- 2015 American deaths

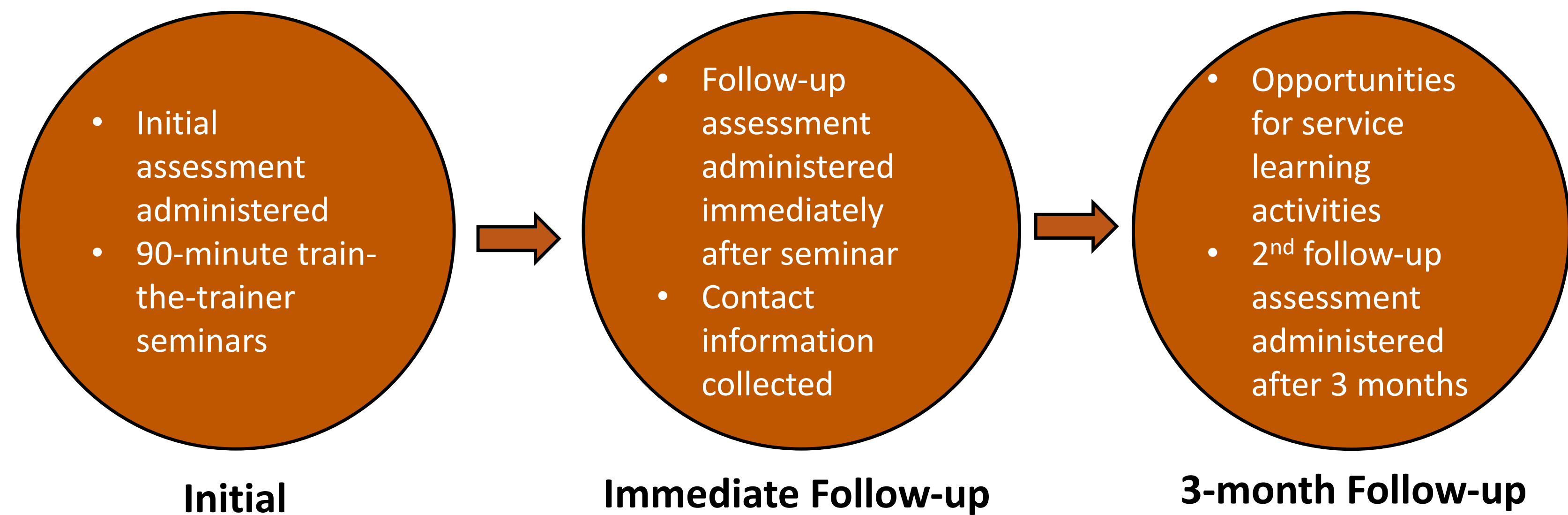


- The United States Department of Health and Human Services identified **expansion of the use and distribution of naloxone** as one of the three priority areas to focus the opioid-drug related overdoses and deaths initiative.
- All U.S. states and D.C. have enacted legislation to increase naloxone access, often by empowering pharmacists to dispense it under a standing order.

OBJECTIVES

- To use a “train the trainer” model to allow students and community members to engage in service learning to respond to opioid overdoses with naloxone.
- To determine the effect of participation in outreach events on overdose-related knowledge retention, self-efficacy ranking, and attitudes regarding harm reduction interventions.

METHODS



Assessment Content:

Knowledge (9): Multiple choice questions
Self-Efficacy (2): Five-point Likert scale questions*
Attitudes regarding Harm Reduction (4): Five-point Likert scale questions*

*Likert scale was ordered as 1 = strongly disagree to 5 = strongly agree, the higher the score the more self-efficacy the participants believed they had or the more positive their attitudes were towards harm reduction strategies

90-minute train-the-trainer seminar:

- Opioid overdose epidemiology
- Risk factors
- Symptoms
- Overdose response training
- Case scenarios

Seminar locations



Community Outreach Service Learning Activities:

Opioid Overdose Trainings (High-Intensity)
Tabling Events (Low-Intensity)



RESULTS

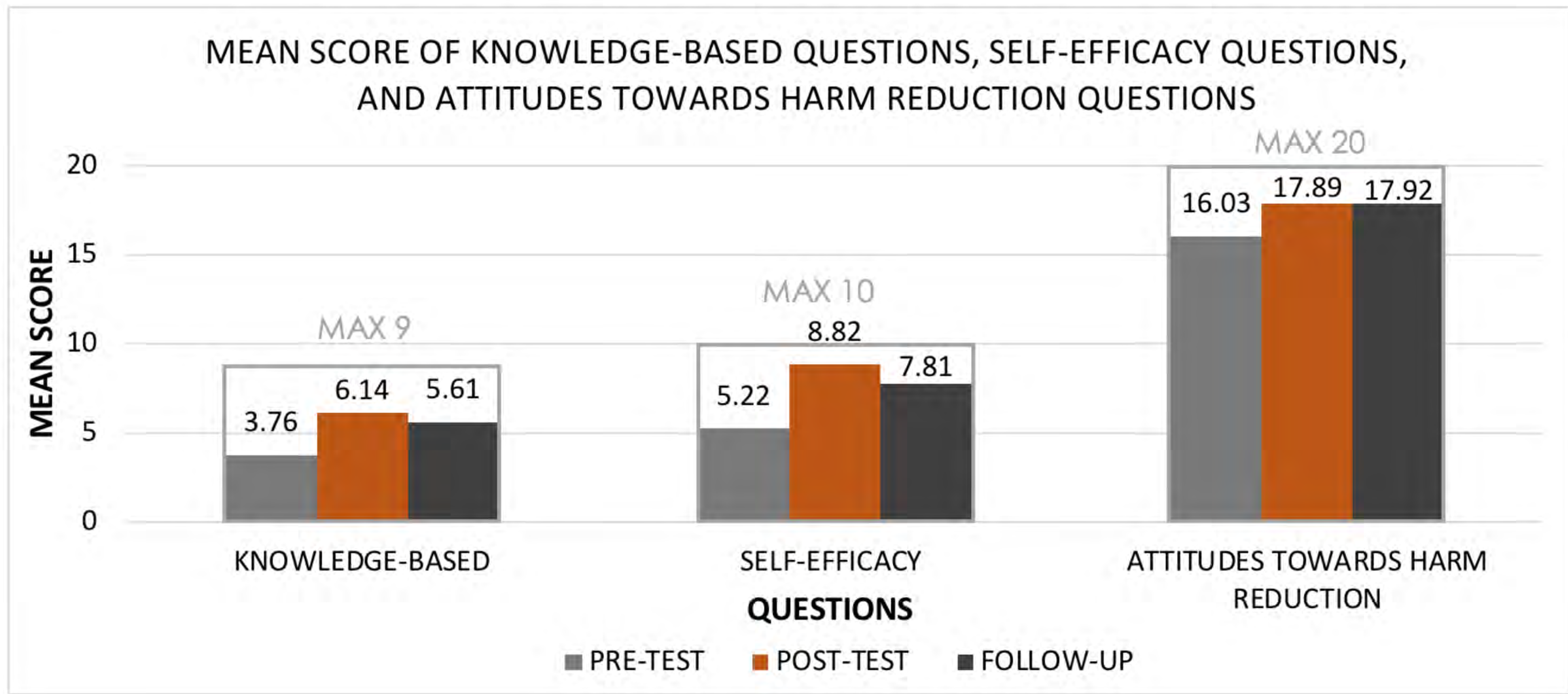


TABLE 1: DIFFERENCE IN MEAN SCORES			
QUESTIONS	DIFFERENCE (P VALUE)		
	PRE VS POST	POST VS FOLLOW-UP	PRE VS FOLLOW-UP
KNOWELDGE	2.67 (<0.001)	0.59 (<0.001)	2.08 (<0.001)
SELF-EFFICACY	3.59 (<0.001)	1.01 (<0.001)	2.59 (<0.001)
HARM REDUCTION	1.86 (<0.001)	0.032 (0.992)	1.89 (<0.001)

Table 1: Difference in Mean Score compares the differences found between the pre, post, and follow-up surveys. There was a significant increase in scores between the pre vs post scores and the pre vs follow-up scores. There was a significant decrease in scores between the post and follow-up in knowledge and self-efficacy. The harm reduction post vs follow-up score difference was not significant.

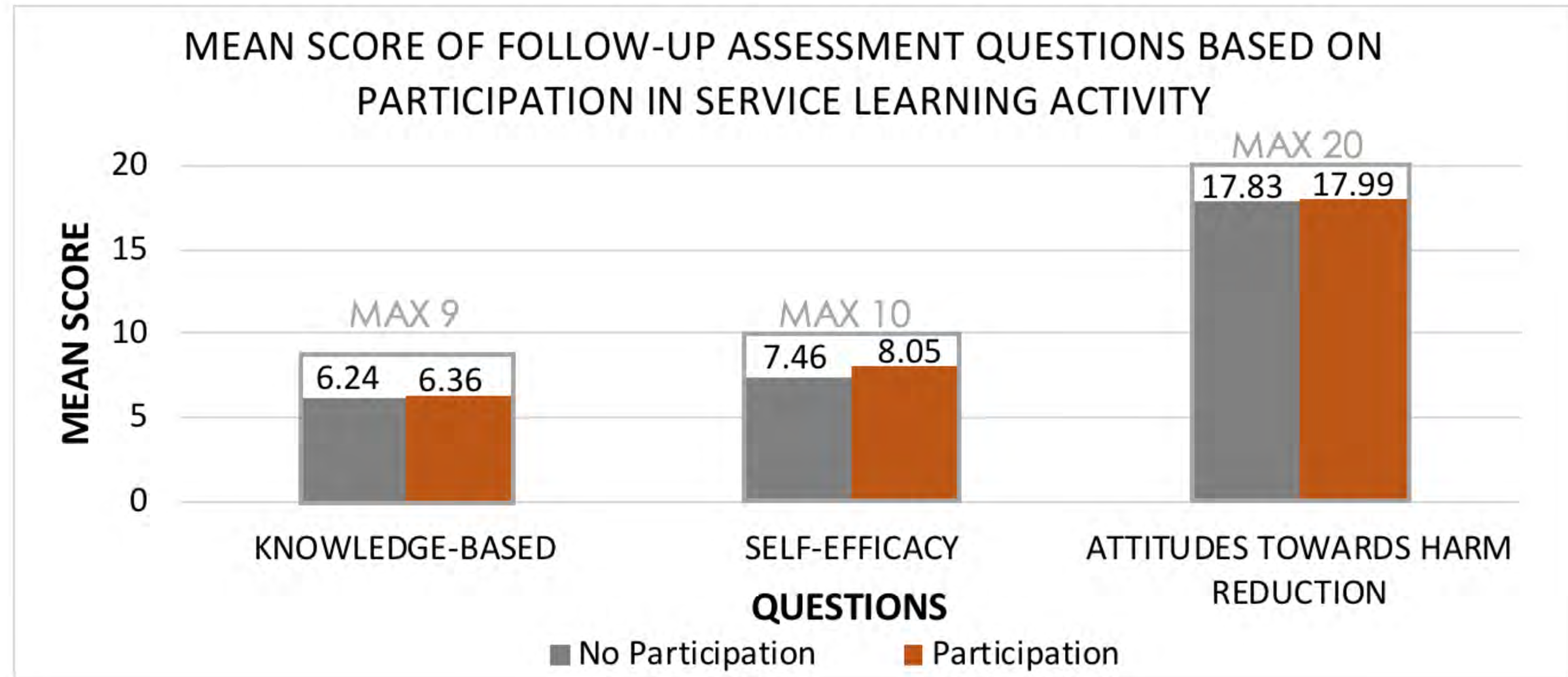


TABLE 2: MEAN SCORE OF FOLLOW-UP ASSESSMENT QUESTIONS BASED ON PARTICIPATION IN SERVICE LEARNING EVENT				
QUESTIONS	NO PARTICIATION (N=54)	PARTICIAPTION (N=80)	Score Difference	P VALUE
KNOWLEDGE	6.24 (± 1.46)	6.36 (± 1.51)	0.12	0.644
SELF-EFFICACY	7.46 (± 1.27)	8.05 (± 1.14)	0.59	0.006
HARM REDUCTION	17.83 (± 2.25)	17.99 (± 1.62)	0.15	0.693

Table 2: Mean Score of Follow-up Assessment Questions Based on Participation in Service Learning Event displays the score difference between participants who attended a service learning event such as a training or tabling event. There was no significant difference between the two scores.

DISCUSSION

- Initial train-the-trainer seminar improved overdose-related knowledge, self-efficacy ranking, and attitudes regarding harm reduction.
- There was **significant increase in scores from pre-assessment to post-assessment and pre-assessment to 3-month follow-up assessment**.
- Some of this benefit was retained after three months; however, **knowledge and self-efficacy scores significantly decrease from post-assessment to 3-month follow-up**.
- Operation Naloxone opioid overdose prevention service learning was beneficial to students and made an impact on the community. Several opioid overdose reversals have been reported as a result of opioid rescue trainings and naloxone distribution.
- Students who participated in community outreach events did not exhibit superiority for any outcomes at follow-up.

FUTURE PLANS

- High-intensity events (trainings) will be prioritized over low-intensity events (tabling) to ensure educational value for participating students.
- Establishment in other Colleges of Pharmacy including Texas A&M, University of Houston, and University of Texas El Paso.

CONTACT

Lubna Mazin, PharmD Candidate 2019: lubna.mazin@utexas.edu

STATISTICS

- Analysis using the independent groups t-test and ANOVA (Tukey HSD).
- Significance was set at $p < 0.05$.
- Analyses were performed using IBM SPSS 25.0® (IBM Crop, Armonk, NY, USA).

SUPPORT

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