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Kerri Lynn Knippen

Bowling Green State University, kknippe@bgsu.edu

Kristina LaVenía

Bowling Green State University, klaveni@bgsu.edu

Melissa W. Burek

Bowling Green State University, mwburek@bgsu.edu

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Teach In - Opioids
Bowling Green State University
Evaluation Report

Prepared by:

Kerri Lynn Knippen, PhD, MPH, RDN, LD, BC-ADM
Kristina LaVenia, Ph.D.
Melissa W. Burek, Ph.D.

Executive Summary

In 2017, the United States Department of Health and Human Services declared a national opioid epidemic. As a result of widespread prescription and non-medical use, the opioid crisis has had devastating impact on Ohioans, including college aged adults. Bowling Green State University took action in 2018 to address the opioid epidemic by hosting a university-wide Teach-In focused on opioids, “*Changing the Story.*” The Teach-In included engagement of faculty, community members, administration, staff, and students to increase knowledge of resources and connect the population with secondary prevention and treatment services. The Teach-In resulted in the development of an original film and course modules focused on bringing attention and awareness to the college campus.

A baseline survey ($n = 275$) was conducted prior to the Teach-In to evaluate perceptions and beliefs of administration, faculty, staff, and students. As a result of this survey, it was clear that the majority of respondents identified opioid use as a chronic disease and national problem, however, respondents were less familiar with current issues or available resources at Bowling Green State University regarding opioid use. A post survey was also conducted ($n = 140$) to evaluate aggregate changes in beliefs, knowledge, and perception about opioid use and resources available. Posttest responses suggested a stronger level of agreement regarding knowledge about treatment options ($p < .001$) and education prevention programs ($p < .001$) being available in the community, knowledge about where to reach out for a personal concern ($p = .013$), knowledge about where to get help for a friend or loved one ($p = .004$), and that BGSU is a community that cares about those struggling with opioid addiction ($p = .001$) than at pretest. These findings suggest that as a result of the Teach-In knowledge regarding resources for education, prevention, and treatment improved.

During the Teach-In, 447 session evaluations were collected; 75% or more of session respondents had strong agreement that the Teach-In location was accessible, speakers were knowledgeable, and the topic was important to be addressed on the college campus. Encouragingly, $\geq 60\%$ indicated a strong agreement that their knowledge on the subject increased as a result of the session, the teaching methods were appropriate, knowledge regarding resources increased, and that the session provided them with ideas that could be used to understand or address the opioid crisis. The majority indicated that they would attend another Teach-In and would recommend future events to friends or colleagues.

Introduction

In 2017, opioids contributed to over forty-seven thousand deaths in the United States (US) (Felter, 2019). Opioids, a class of drugs, are typically prescribed as a pain reliever (CDC, 2018). Opioids include prescription opioids such as oxycodone, hydrocodone, morphine, and methadone, as well as fentanyl (synthetic) and the illegal drug, heroin (CDC, 2018). Opioid use is generally safe, when used in a limited duration and when prescribed by a physician (National Institutes of Health (NIH), 2019). Even when used regularly, opioids can be misused and may lead to addiction, overdose, and death (NIH, n.d.).

Opioid use disorder (OUD), as defined in the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), is a pattern of opioid use that leads to clinically significant impairment or distress (CDC, n.d.). Diagnosis requires identification of at least 2 of the 11 criteria outlined by the DSM-5 within a 12 month period.

According to the Substance Abuse and Mental Health Services Administration (SAMHSA) report, 11.5 million people over the age of 12 misused opioids and 948,000 used heroin in 2016 in the US (Alexander, Keahey & Dixon, 2018). In 2017, there were enough opioids being prescribed that each person in the US could have their own prescription (CDC, 2018). Overall, the prescribing rate of opioids in 2017 was 58.7 prescriptions per 100 people, although some counties in the US had prescribing rates that were nearly 7 times higher (CDC, 2018). In Ohio, the rate of opioid related deaths tripled from 2010-2016, with 3,613 opioid-related deaths reported in 2016, which equates to a rate of 32.9 deaths per 100,000 persons (NIH, 2018).

Opioid use has been identified across all adult age groups, with young adults aged 18-25 having the highest nonmedical use of opioids (Bonnie, Ford & Phillips, 2017). Prescription

opioids are most common among adults aged 26 and older (Bonnie, Ford & Phillips, 2017).

SAMHSA data indicates that opioid use disorder most often begins during the early to late 20s of an individual's life. (Bonnie, Ford & Phillips, 2017). This age range includes college students who often begin using opioids as a result of social pressure and a fear of social consequences (Champion, Lewis & Myers, 2015).

In 2017, the US Department of Health and Human Services declared the opioid epidemic a national crisis. The common use of opioids among young adults makes college campuses an ideal environment to address the current opioid epidemic. A Teach-In, usually held on a college campus, is a meeting consisting of lectures, debates, and discussions to raise awareness on a social or political issue (Merriam-Webster, n.d.). The first Teach-In, held at the University of Michigan in 1965, aimed to involve students and faculty in the opposition of moral, political, and military consequences; Columbia University followed a few days later (History, 2018). A Teach-In was held at Bowling Green State University (BGSU) in 1971, one year after the Kent State shooting. While Teach-In events originated as a participatory response to moral or political challenges, the framework provides an opportunity to address current social and public health concerns, including the opioid crisis.

Given the widespread effects of opioid use and the concerning statistics regarding use among young adults, college campuses are a unique environment where both primary and secondary prevention efforts may have benefit. A Teach-In was held at BGSU in the Fall Semester of 2018 to address the opioid crisis by delivering education to improve knowledge about opioids and to connect the population with prevention and treatment services.

Purpose of Evaluation

The purpose of this evaluation is to (1) render judgement about the Teach-In activities (2) demonstrate accountability to proposed goals and objectives and (3) transfer knowledge for future programs targeted at improving knowledge and resources for faculty, students, and staff at BGSU, and the local community.

Steering Committee

The Co-Chairs of the Steering Committee for the Teach-In were Drs. Melissa Burek and Ken Newbury. Listed below are the primary faculty, staff, and student (*) members of the various subcommittees of the Steering Committee and descriptions.

Teach-In Steering Subcommittees	Members
Logistics – coordinates and designates where speakers, events, activities, resources will be held	Jolie Sheffer Elizabeth Brownlow V Rosser Paul Valdez
Publicity – works with M&C to create publicity materials, webpages, and work with social media and traditional media outlets	Ann Krebs Jerry Schnepf Cynthia Roberts Chris Cavera Reagan Shull*
Volunteer – recruits and organizes volunteers driven by event needs	Paul Valdez V Rosser
Research & Evaluation – Develops and administers data collection instruments related to the event and its activities. Analyzes data and writes a report.	Kristina LaVenja Kerri Knippen
Providers, Resources, and Presenters – Invites presenters and providers, determines and organizes resources for the event	Laura Fullenkamp Sharon Schaeffer Nancy Orel Jared Rose Kate Hudson John Zibbel

Curriculum – develops or finds university faculty to create educational modules from a variety of subject areas for faculty to use in their classes

Jon Sprague
Harold Rosenberg
Scott Martin
Susan Carlton
Samantha Hughes*

Student Groups and Activity Committee – Student representatives provide input and help plan while recruiting student groups to host activities or displays and this committee plans simulations, role plays, Falcon Angels, and similar

Ann Darke
Megan Hartzog
Catherine Pape
Tiffany Burchett*
Brandon Peebles*
Alexandria Sigsworth*

Teach-In Goals and Objectives

The following was outlined in advance of the Teach-In: *To provide a university-wide Teach-In with a focus on the opioid epidemic to improve knowledge related to opioid use disorder prevention, treatment, and resources for BGSU and the local community.*

1. By September 25, 2018, a university-wide Teach-In will be held to provide education regarding the opioid epidemic to students, faculty, staff, and the local community.
2. After the Teach-In, at least 50% of participants will report increased knowledge about local resources and topic(s) addressed by the session(s) attended.
3. After the Teach-In, at least 50% of participants would recommend or would attend a future Teach-In.

Program Description

The educational program included the use of a university-wide Teach-In, “*Change the Story*” focused on opioids. The Teach-In included a time-limited and focused evaluation of the current opioid epidemic within Ohio and also nationally. The Teach-In engaged the entire University community, including students, community members, administration, faculty, and staff, in an engaging and participatory educational effort. The Teach-In also was attended by

community leaders and members. Stakeholders from the community were involved with the planning process but also provided expertise for presentations and the resource fair. The Teach-In included 30 speakers and 14 scheduled lecture sessions (Table 1) with topics related to the neurology of addiction, family experiences, prevention, treatment options, recovery, warning signs, approaches to pain management, intergenerational concerns, naloxone training, and policy.

Table 1 – Lectures Presented

-
1. MAM, is your boy blue? The neurology of addiction
 2. When it touches home: family experiences and addiction
 3. Pathways and setbacks: recovery and addiction
 4. Our lines are open: treatment for addiction
 5. Decreasing probability: prevention matters
 6. Addictions 101
 7. Warning signs and reaching out: starting the conversation
 8. From dispensing to disposing of medications
 9. Across the lifespan: intergenerational addiction
 10. Policy and the opioid crisis
 11. The other side of the coin: healthy approaches to pain control and management
 12. Naloxone training
-

Faculty at BGSU also developed an original film, “*Change the Story*” that was presented in the BGSU theater. The film provided an opportunity for discussion and reflection. A second film, “*Chasing Hope*” was also presented and followed by a reflection and discussion. Faculty at BGSU also developed six modules (Table 2) that were made available in the Canvas Commons for import into course shells, so that all faculty could support the mission of the Teach-In for their respective courses. Lastly, the Teach-In included opportunities for participants to share how opioids have impacted their life and to communicate support for those impacted by the crisis.

BGSU Marketing and Communications created a logo specific to the Teach-In (see Figure 1). This logo was used on all correspondences and developed in the hopes that it could be used for future Teach-Ins on salient topics affecting society. A webpage was also created on the BGSU main website with content that describes what a Teach-In is, the agenda and program for

the event, and links on background and resources on the opioid crisis. The URL is:

www.bgsu.edu/changesthestory.

Figure 1. Teach-In Logo

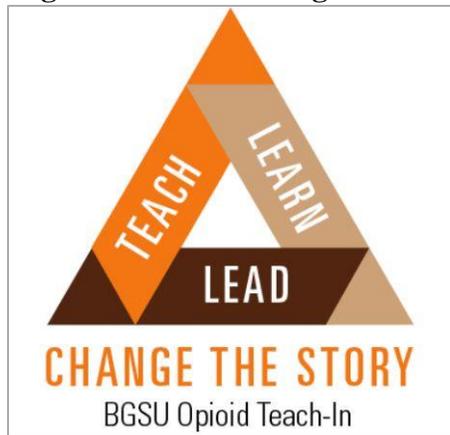


Table 2 – Canvas Modules Developed

-
1. Opioids and Sleep Disorders Opioid Teach-In 2018 by Dr. Michael Geusz
 2. Opioid Crisis Public Relations Campaigns by Dr. Terry Rentner
 3. Reward Valuation and Drug Addiction by Dr. Howard Cromwell
 4. Introduction to Harm Reduction for Opioid Users by Dr. Harold Rosenberg
 5. Generation Rx - Safe Medication Practices for Life by Joanne Sommers, M.Ed., CHES
 6. Change the Story: The Film and Discussion Guide by Dr. Ken Newbury
-

Please refer to the Appendix for the detailed Teach-In program.

Evaluation Design & Data Collection

A pre and post survey was conducted to evaluate university-wide beliefs, knowledge, and perceptions regarding the opioid epidemic. The survey was pilot tested (n = 19) by a sample of current, registered graduate and undergraduate students. The pilot testing included an opportunity to view the survey items and provide feedback about the wording, response options, visual appeal, logical order, and navigation of the online survey. The pilot feedback was positive and no changes to the wording of items or the survey was required.

The pre and post survey was administered using an anonymous electronic survey hosted by *Qualtrics*, the online survey available to BGSU faculty, staff, and students. The survey

announcement was sent through email to a random, representative sampling frame including 5,181 individuals comprised of undergraduate and graduate students, faculty, staff, and administration at BGSU. The pre survey included items related to knowledge, perceptions, and beliefs about the opioid epidemic, as well as, demographic items. Most items included a close ended response option, using a 5-point Likert agreement/disagreement scale. The post survey, delivered to the initial sampling frame, mirrored the pre survey but also included an item where respondents could select the session(s) attended for the Teach-In. A maximum of three email reminders was sent to non-responders for the pre survey and four reminders were sent for the post survey to improve the response rate.

Session-specific evaluations were also collected the day of the Teach-In to summarize presentation characteristics (acoustics, visuals, handouts, and elocution) and change in knowledge. The evaluation included items to determine if the respondent would attend or recommend future Teach-In events. Most items were measured using a 5-point Likert agreement/disagreement scale. Two open-ended items were included to allow the participant to provide comments about the session attended and the overall Teach-In.

Descriptive and inferential statistics were conducted using SPSS, Version 24.0. Based on non-normal distribution determined from the Kolmogorov-Smirnov test ($p < .001$) non-parametric, bivariate tests including Spearman correlation, Mann Whitney U (U) (for categorical variables with 2 groups), and Kruskal Wallis (KW) (for categorical variables with 3 or more groups) tests were used. For significant KW tests, pairwise differences were evaluated using the Mann Whitney test while applying the Bonferroni correction. Qualitative comments from the session evaluation were reviewed to identify common themes relative to the Teach-In.

Results

After removing incomplete or low-quality responses, the pre survey resulted in 275 responses (5% response rate). The pre survey sample primarily included those who identified as white (69%), non-Hispanic (90%), and female (72%). Overall 64% of responses were obtained from the student body, 17% from faculty, 15% from staff, and 4% from administration. After removing incomplete or low quality responses the post survey data collection included 140 eligible responses (3% response rate), including 60% of responses from students, 21% from faculty, 14% from staff, and 5% from administration.

Within the student body, nearly a fourth of respondents for the pre and post survey identified as a Graduate student. For both the pre and post representation from all class rankings was noted (Table 3). Relative to faculty composition, all colleges were represented for both the pre and post survey, with the majority of respondents from the College of Arts and Sciences, followed by the College of Health and Human Services. More than half of employee respondents (pre - 65.4%, post – 57.2%) had been employed at BGSU for 9 years or less.

Baseline Evaluation

The majority (80%) of student respondents agreed that opioid use disorder is a chronic disease (Table 4). Nearly 90% of the student respondents agreed that opioids are a problem in Ohio, however, only 15% agreed that opioids are a concern at BGSU. Among employee respondents, 78% agreed that opioid use disorder is a chronic disease and 95% agreed that Opioids are a problem for Ohio. However, when employees were asked to evaluate whether or not opioids are a problem at BGSU, indifference was noted by 63% of respondents, with only 27% agreeing and 10% disagreeing.

Table 3 – Stratified Pre and Post Survey Respondent Characteristics ^a

Variable	<i>Students</i>		<i>Employees</i>	
	Pre n (%)	Post n (%)	Pre n (%)	Post n (%)
<i>Class Standing</i>				
Freshman	26 (17.8)	10(13.5)	-	-
Sophomore	19 (13)	14(18.9)	-	-
Junior	35 (24)	9(12.2)	-	-
Senior	27 (18.5)	23(31.1)	-	-
Graduate Student	36 (24.7)	17(23.0)	-	-
<i>Gender</i>				
Male	37 (25.3)	14(18.9)	17 (21.5)	12(24)
Female	107 (73.3)	54(75)	55 (69.6)	38(76)
Other/Prefer not to answer	2 (1.4)	4(5.6)	7 (8.9)	0(0)
<i>Ethnicity</i>				
Hispanic	4 (2.9)	3(4.5)	1 (1.3)	3(6.4)
Non-Hispanic	125 (91.2)	57(86.4)	65 (86.7)	43(91.5)
<i>Race</i>				
White	123 (84.8)	61(84.7)	65 (81.3)	45(90)
Black or African American	9 (6.2)	3(4.2)	5 (6.3)	2(4)
American Indian or Alaska Native	0 (0)	0(0)	0 (0)	0 (0)
Asian	1 (.7)	0(0)	1 (1.3)	0 (0)
Native Hawaiian or Pacific Islander	1 (.7)	0(0)	0 (0)	0 (0)
Other	8 (5.5)	8(11.1)	1 (1.3)	3(6)
<i>Faculty Position / Rank</i>				
Instructor	-	-	11 (25)	4(12.5)
Lecturer	-	-	3 (6.8)	6(18.8)
Senior Lecturer	-	-	2 (4.5)	0(0)
Assistant Professor	-	-	8 (18.2)	5(15.6)
Associate Professor	-	-	9 (20.5)	8(25)
Professor	-	-	5 (11.4)	2(6.3)
<i>College Affiliation</i>				
College of Arts and Sciences	-	-	13 (31)	11(35.5)
College of Business	-	-	2 (4.8)	2(6.5)
College of Education and Human Development	-	-	8 (19)	4(12.9)
College of Health and Human Services	-	-	11 (26.2)	7(22.6)
College of Musical Arts	-	-	5 (11.9)	2(6.5)
College of Technology, Architecture, and Applied Engineering	-	-	2 (4.8)	1(3.2)
BGSU Firelands	-	-	0 (0)	0(0)
College of Graduate Studies	-	-	1 (2.4)	2(6.5)
<i>Number of Years Employed</i>				
Less than 1	-	-	9 (11.3)	2(4.1)
1 to 4 years	-	-	28 (35)	17(34.7)
5 to 9 years	-	-	15 (18.8)	9(18.4)

Table 3 continued...

	<i>Students</i>		<i>Employees</i>	
	Pre n (%)	Post n (%)	Pre n (%)	Post n (%)
10 to 14 years	-	-	11 (13.8)	6(12.2)
15 to 19 years	-	-	8 (11.3)	7(14.3)
20 or more years	-	-	9 (11.3)	8(16.3)

^aPercentage (%) is based on the valid percentage – totals may not add to 100%

Relative to awareness of resources, approximately half of student respondents were ambivalent about whether or not adequate resources were available at BGSU for those struggling with opioid addiction or those with a loved one struggling with addiction. Similar levels of indifference were noted among employees regarding whether or not BGSU offers sufficient resources for those with opioid addiction or for those with family or friends struggling with addiction (65% and 67%, respectively). However, an increased number of students and employees believed that treatment and prevention options were available in their community.

Approximately half (53%) of the student sample reported that they would know where to turn for help for a personal concern and 48% were aware of where to reach out for help for a friend for family member. Nearly two-thirds (66%) of employee respondents agreed that they would know where to reach out if they had a personal concern about substance abuse or dependency and 62% agreed they would know where to reach out for help for concerns about a friend or loved one. Among students and employees, 36% of each sub-sample did not believe that they would be able to recognize signs or symptoms of opioid use.

When beliefs about the efforts of BGSU were evaluated, 54% of student respondents and 63% of employee respondents agreed that BGSU is a community that cares about people struggling with opioid addiction. Two-thirds (69%) of student respondents and 84% of employee respondents indicated that they believed people in Ohio were working to address the opioid epidemic. Lastly, the overwhelming majority of student and employee respondents (92% and

Table 4 – Pre and Post Survey Response Frequencies Stratified by Student and Employee Respondents^a

Statement	<u>Student Respondents</u>						<u>Employee Respondents</u>					
	<i>Pre n (%)</i>			<i>Post n (%)</i>			<i>Pre n (%)</i>			<i>Post n (%)</i>		
	Disagree	Neither Disagree or Agree	Agree	Disagree	Neither Disagree or Agree	Agree	Disagree	Neither Disagree or Agree	Agree	Disagree	Neither Disagree or Agree	Agree
Opioid use disorder is a chronic disease	17 (11.8)	12 (8.3)	115 (79.8)	9 (12.6)	11 (15.5)	51 (71.8)	12 (14.8)	6 (7.4)	63 (77.8)	9 (18)	5 (10)	36 (72)
Opioids are a problem in Ohio	6 (4.1)	9 (6.2)	131 (89.7)	1 (1.4)	3 (4.2)	67 (94.4)	3 (3.7)	1 (1.2)	77 (95.0)	1 (2)	0 (0)	49 (96)
Opioids are a problem at BGSU	28 (19.2)	95 (65.1)	23 (15.7)	12 (16.9)	45 (63.4)	14 (19.7)	8 (9.9)	51 (63.0)	22 (27.2)	8 (16)	22 (44)	20 (40)
BGSU offers sufficient resources for people struggling with opioid addiction	21 (14.3)	82 (55.8)	44 (29.9)	9 (12.8)	33 (47.1)	28 (40)	13 (16.0)	53 (65.4)	15 (18.5)	9 (18)	24 (48)	17 (34)
BGSU offers sufficient resources for people who have a loved one who is struggling with opioid addiction	23 (15.6)	72 (64.6)	52 (35.4)	11 (15.7)	31 (44.3)	28 (40)	17 (21.0)	54 (66.7)	10 (12.3)	10 (20)	26 (52)	14 (28)
Treatment options for opioid dependency or problematic use are available in my community	22 (15.0)	55 (37.4)	70 (47.7)	7 (10)	19 (27.1)	44 (62.8)	9 (11.1)	18 (22.2)	54 (66.6)	1 (2)	7 (14)	42 (84)
Opioid prevention programs are	37 (21.9)	48 (32.9)	61 (41.8)	11 (15.7)	17 (24.3)	42 (60)	12 (14.8)	23 (28.4)	46 (56.8)	1 (2)	12 (24)	37 (74)

available in my community												
I know where to reach out for help if I am worried about my own personal substance use or dependency	53 (26.5)	15 (10.2)	79 (53.8)	15 (21.4)	4 (5.7)	51 (72.9)	15 (18.8)	13 (16.3)	52 (65.1)	6 (12)	8 (16)	36 (72)
I know where to reach out for help if I am worried about a friend or loved one's substance use or dependency	59 (40.4)	16 (11.0)	71 (48.6)	15 (21.4)	6 (8.6)	49 (70)	19 (23.5)	12 (14.8)	50 (61.7)	7 (14)	8 (16)	35 (70)
I would be able to recognize the signs or symptoms of long term opioid use	53 (36.1)	18 (12.2)	76 (51.7)	16 (22.8)	8 (11.4)	42 (60)	28 (34.6)	16 (19.8)	37 (45.7)	16 (32)	5 (10)	19 (58)
BGSU is a community that cares about people struggling with opioid addiction	18 (12.2)	50 (34.0)	79 (53.7)	4 (5.7)	17 (24.3)	49 (70)	3 (3.7)	27 (33.3)	51 (63)	2 (4)	7 (14)	31 (82)
People in Ohio are working to help address the opioid epidemic	26 (17.7)	20 (13.6)	101 (68.7)	12 (17.2)	9 (12.9)	49 (70)	3 (3.7)	10 (12.3)	67 (83.9)	4 (8)	2 (4)	34 (88)
It is important that BGSU is taking a stand on opioid use	4 (2.7)	8 (5.4)	135 (91.8)	1 (1.4)	4 (5.7)	65 (92.8)	3 (3.7)	6 (7.4)	72 (88.9)	2 (4)	3 (6)	45 (90)

^a Combined strongly disagree/disagree and strongly agree/agree responses

90% respectively) indicated that they believed it was important for BGSU to take a stand on opioid use.

Differences in knowledge, beliefs, and perceptions at baseline based on sample characteristics were determined for the various respondent groups (e.g., employees and students). Employees had a higher level of agreement that people in Ohio were working to address the opioid epidemic ($p = .001$) compared to student respondents. Similarly, employee respondents had a stronger awareness of resources at BGSU ($p = .002$) and knowing where to go for help ($p = .015$). Among student respondents, males had a higher level of agreement that they could recognize the signs or symptoms of opioid use compared to females ($U = \text{adjusted } p = 0.06$). Relative to employees, a stronger level of perceived problem in Ohio was identified based on college affiliation, ($KW = 15.160, p = .019$), faculty in the College of Health and Human Services had a stronger perception of the problem compared to those in the College of Arts and Sciences (adjusted $p = .032$). Similarly, faculty differences were observed related to the belief regarding importance for BGSU to take action ($KW = 14.916, p = .021$), with faculty in the College of Health and Human Services also having stronger agreement of the importance compared to those in the College of Arts and Sciences (adjusted $p < .05$).

Within the student body, the majority of respondents for the pre and post survey indicated that they would recommend BGSU counseling services to take action about a concern regarding opioid use (Table 5). Employee respondents for the pre and post survey most commonly indicated that they would discuss a concern about substance use or dependency with their program chair or supervisor or that they would report to the BGSU counseling center.

Post Survey Results

The aggregate changes in knowledge, perceptions, and beliefs was evaluated based on the pre and post survey data. The results are summarized in Table 6. Notably, significant changes in

Table 5 – Frequencies for actions one would take – Stratified by Student and Employee^a

Action	<i>Students</i>		<i>Employees</i>	
	Pre n (%)	Post n (%)	Pre n (%)	Post n (%)
Report to resident advisor	55 (30.2)	32(38.1)	-	-
Report to academic advisor	26 (14.3)	10(11.9)	-	-
Talk to one of my professors/instructors	45 (24.7)	19(22.6)	-	-
Refer to BGSU counseling	129 (70.9)	53(63.1)	39 (42.9)	27(49.1)
Discuss with program chair / supervisor	14 (7.7)	11(13.1)	45 (49.5)	22(40)
Reach out to community group	47 (25.8)	24(28.6)	14 (15.4)	18(32.7)
Talk to one of my colleagues	-	-	25 (27.5)	18(32.7)
Talk to my family member	-	-	21 (23.1)	17(30.9)
Talk to a friend outside BGSU	-	-	18 (19.8)	14(25.5)

^a Totals may add up to > 100% as participants could check all that apply

the level of agreement regarding knowledge of treatment options in the community ($p < .001$), education prevention programs in the community ($p < .001$), knowledge for being able to reach out for help for a personal concern ($p = .013$), and for that of a loved one ($p < .001$) were observed as a result of the Teach-In. Furthermore, the belief that BGSU is a community that cares about people struggling with opioid addiction was stronger for the post survey ($p < .001$). For each association, the level of agreement was higher for the post survey compared to the pre survey sample.

Table 6 – Evaluation of Aggregate Changes in Knowledge, Beliefs, and Perceptions

Item	Mann Whitney U	p value
Opioid use disorder is a chronic disease.	-.780	.435
Opioids are a problem in Ohio.	-.535	.592
Opioids are a problem at BGSU.	1.229	.219
BGSU offers sufficient resources for people struggling with opioid use.	1.794	.073

BGSU offers sufficient resources for people who have family or friends struggling with opioid use.	1.040	.298
Treatment options for opioid dependency or problematic use are available in my community.	3.206	.001

Table 6 continued...

Item	Mann Whitney U	p value
I know where to reach out for help if I am worried about my own personal substance use or dependency.	2.497	.013
I know where to reach out for help if I am worried about a friend or loved one's substance use or dependency.	2.874	.004
I would be able to recognize the signs or symptoms of long term opioid use.	1.804	.071
BGSU is a community that cares about people with opioid use disorder.	3.194	.001
People in Ohio are working to help address the opioid crisis.	1.091	.275
It is important that BGSU is taking a stand on opioid use.	.925	.355

Based on the Ziggy Points check-in system or sign-in sheets available at each session, we counted a total of 2,000 unduplicated, attendees who went to at least one session at the Teach-In. At least 46 faculty members required attendance at the Teach-In, resulting in at least 1,318 students who signed in and attended the event for a course. The Teach-In was attended primarily by undergraduate students; however, session evaluations were also collected from graduate students, faculty, staff, administrators, and community members. Session specific feedback was collected from 447 evaluations. Most respondents for the session evaluations reported that they heard about the event from an instructor/professor (90.8%) or through email (19.5%). The majority of respondents agreed that the session location was accessible (97.3%), acoustics were easy to hear (97.5%), visuals were easy to read (91.4%), and visuals were helpful (94.1%). Respondents agreed that the speaker was knowledgeable and able to respond to questions (98.1%)

and 95.3%, respectively). The majority agreed that the presentation aligned with the topic or description (95.1%) and that the teaching methods were appropriate (94.2%). The overwhelming majority (97.7%) also agreed that the session topic was important to address on a college campus.

Encouragingly, 60% or more of respondents indicated a strong agreement that their knowledge on the subject and resources available increased and that the session provided ideas that could be used to understand or impact the opioid crisis. The majority (84.5%) indicated that they would attend another Teach-In and 87.8% would recommend future events to friends or colleagues.

Qualitative comments from the Teach-In session evaluations were reviewed. The majority of the qualitative responses were positive, and in support of the Teach-In. A common theme emphasizing the benefit of including real-life experiences and application were identified among attendees. Attendees also reported the importance of the topic and the benefit of addressing on the college campus. Importantly, respondents identified the value in being able to “Change the Story”. Sample qualitative comments are summarized below for elaboration.

Real Life Experience Valued

I really loved the aspect of parents sharing their own children's stories. It brings it into a whole new perspective on how it affects families and friends. I give a great deal of credit for the 4 individuals who were able to talk about their stories.

Very powerful, made an impact on the importance of being informed about the opioid epidemic. Made it known that it is real, very important and informative. It was so good.

It really brought my attention to it and informed me of how it affects everyone, not just the victim.

The stories really help you understand what people go through and the hardships families and users go through.

Importance of the Subject

Very powerful! An exceptional way to portray this very important subject. I have lots to think about!

I felt it was very informative. I am from Dayton so I felt it was very knowledgeable. Thank you for bringing this to campus!

Thank-you for putting this together! I wish every class on campus would have cancelled classes and gotten involved in this! Wish the video would have involved people in high school that were teens and how they got involved in drugs/pills.

Very knowledgeable and effective in presenting relevant information on such a large topic and relatable experiences that could affect the common college students.

I am very glad we had this because opioids are such an issue now and we don't know a lot about them.

This is an important topic that needs to be discussed. Thank-you for providing this opportunity. Such a great idea, very important.

Being able to Change the Story

Was clear about how much drug overdoses affect other people more than just the person who is now dead. People need to step up and try their hardest to help other people not just watch it happen.

I learned a lot in this session. I know what to look for in someone as signs.

This film touched me deeply because of friends being addicted and I am currently trying to get them help.

I learned it is very important to talk to your children about these things. I learned a lot from this session that I never knew before. I also learned you can do things that is age appropriate for the children in your classroom about prevention/addiction.

Discussion and Conclusion

The evaluation results are subject to concerns with self-reported responses, which may have been influenced by social desirability bias and educational content. While the evaluation plan did include a pre and post evaluation design, the low response rate for the pre survey and

the limited responses for the post evaluation does limit the interpretation of the pre and post data. Despite these limitations, the findings reinforce the benefit of collaborative efforts between institutions of higher education and community agencies to address the opioid epidemic. The Teach-In was an effective method to engage the community, stakeholders, and increase awareness and knowledge on the topic.

In summary, the program was successful in meeting the pre-determined educational goals and objectives for the Teach-In. Bowling Green State University was successful in a number of ways: (1) engaging the public and community organizations to bring awareness regarding the opioid epidemic (2) connecting community members and the BGSU community to resources and education about opioids (3) the sessions were well attended by a variety of participants and (4) the session specific impact evaluation demonstrated overall improved knowledge about the subject, resources in the community, and ways to address or understand the opioid epidemic.

References

- Alexander, L.M., Keahey, D., Dixon, K. (2018). Opioid use disorder: a public health emergency. *Journal of the American Academy of Physician Assistants*, 31(10), 47-52. doi: 10.1097/01.JAA.0000545072.09344.ee.
- Bonnie, R.J., Ford, M.A., Phillips, J.K. (2017). *Pain management and the opioid epidemic: balancing societal and individual benefits and risks of prescription opioid use*. Washington, D.C.: The National Academies Press.
- Centers for Disease Control. (n.d.) Module 5: assessing and addressing opioid use disorder (OUD). Retrieved from <https://www.cdc.gov/drugoverdose/training/oud/accessible/index.html>
- Centers for Disease Control. (2018). Opioid basics. Retrieved from <https://www.cdc.gov/drugoverdose/opioids/index.html>
- Centers for Disease Control. (2018). U.S. opioid prescribing rate maps. Retrieved from <https://www.cdc.gov/drugoverdose/maps/rxrate-maps.html>
- Campion, D.A., Lewis, T.F., Myers, J.E. (2015). College student alcohol use and abuse: social norms, health beliefs, and selected socio-demographic variables as explanatory factors. *Journal of Alcohol and Drug Education*, 59(1), 57-82.
- Felter, C. (2019). The U.S. opioid epidemic. Retrieved from <https://www.cfr.org/backgrounders/us-opioid-epidemic>
- Groth, G.G., Longo, L.M., Martin, J.L. (2017). Social media and college student risk behaviors: a mini-review. *Addictive Behaviors*, 65, 87-91. doi: 10.1016/j.addbeh.2016.10.003
- History. (2018). First teach-in conducted. Retrieved from <https://www.history.com/this-day-in-history/first-teach-in-conducted>

National Institutes of Health. (2018). Ohio opioid summary. Retrieved from

<https://www.drugabuse.gov/drugs-abuse/opioids/opioid-summaries-by-state/ohio-opioid-summary>

National Institutes of Health. (n.d.) Opioids. Retrieved from

<https://www.drugabuse.gov/drugs-abuse/opioids>

Ohio Department of Health. (2018). Annual drug overdose report shows eight-year low in prescription opioid deaths and four-year low in heroin deaths in Ohio. Retrieved from

<https://odh.ohio.gov/wps/portal/gov/odh/media-center/ODH-News-Releases/Annual-Drug-Overdose-Report>