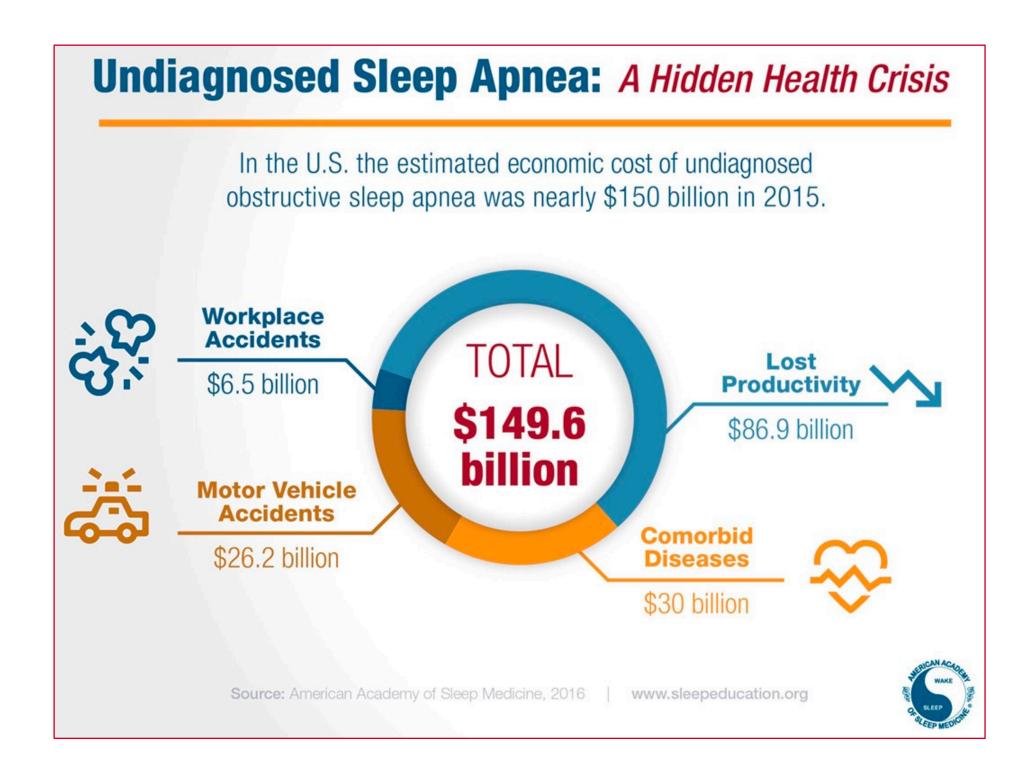


NTRODUCTION

- Obstructive sleep apnea (OSA) is a condition that involves repetitive blocking or collapses of the upper respiratory tract during sleep
- It has been identified as the most common breathing-related sleep disorder and is one of global concern
- Undiagnosed and untreated OSA is linked to declines in overall health, increased risk of fatality, and reduced life quality



BACKGROUND & SIGNIFICANCE

- OSA is highly prevalent among the psychiatric patient population
 - Co-occurrence rates with mental illness as high as **30 - 50%**
- OSA is not a part of routine screening and is **under identified** in the psychiatric setting
- Comorbid OSA is linked to a higher severity of psychiatric clinical manifestations
 - \succ Including: depressed mood, anxiety, psychosis, concentration impairments, irritability, and overall distress
- Individuals with OSA experience regular mental health symptoms at a rate of **3 times** that of the general population
- Evidence depicts a **bidirectional** relationship between OSA and mental illness
- OSA has been statistically linked to an increased rate of rehospitalization and is an independent risk factor for readmission

Sleep Apnea and Psychiatric Illness: An Educational Program and Protocol to Improve Knowledge, Attitudes, and Screenings

Jeffrey Dynof, BS, RN-BC

PURPOSE

To improve the delivery of holistic care in the psychiatric setting by equipping HCPs with the knowledge and tools to effectively screen patients for OSA risk, provide education, and administer meaningful interventions to meet and address patients' overall needs

CLINICAL QUESTION

Among health care providers delivering psychiatric care (P), will the implementation of a continuing education program and practice recommendations (I) help improve knowledge, attitudes, patient education, and screenings (O) as compared to one's current practice (C)?

METHODOLOGY

Intervention

- An online continuing education course was implemented and delivered via Canvas LMS
- Project participants learned best-practices in assessing, screening, and connecting their patients to follow-up care through a series of progressive, active-learning modules

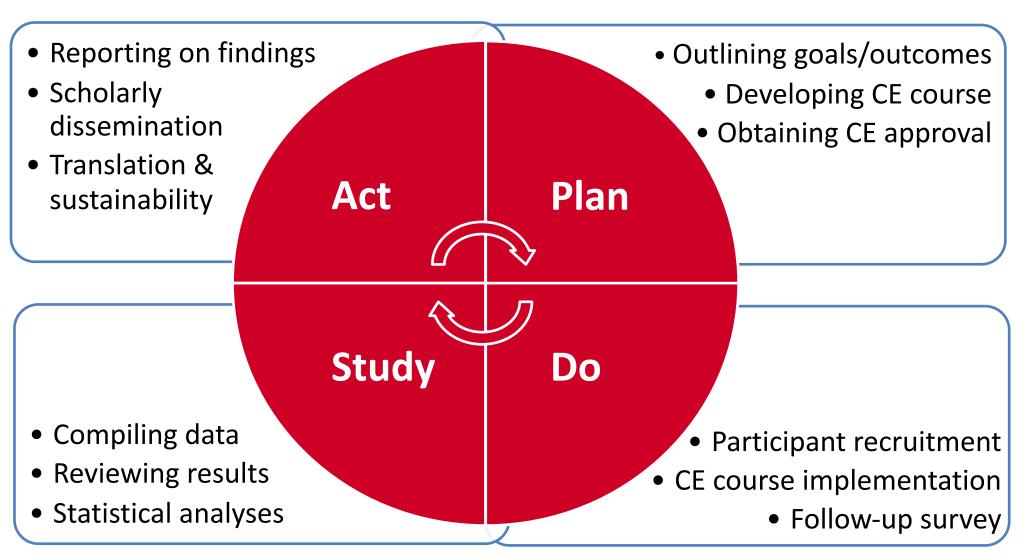
Sample

- 22 HCPs practicing in the behavioral health field participated in the project
- Recruitment directed toward professional organizations of psychiatric providers
- A certificate for 1.5 contact hours was provided for successful completion

Outcome Measures

- Pre/Post tests assessing knowledge
- Pre/Post surveys assessing attitudes, confidence levels, and screenings
- Follow-up survey (post 6 weeks)

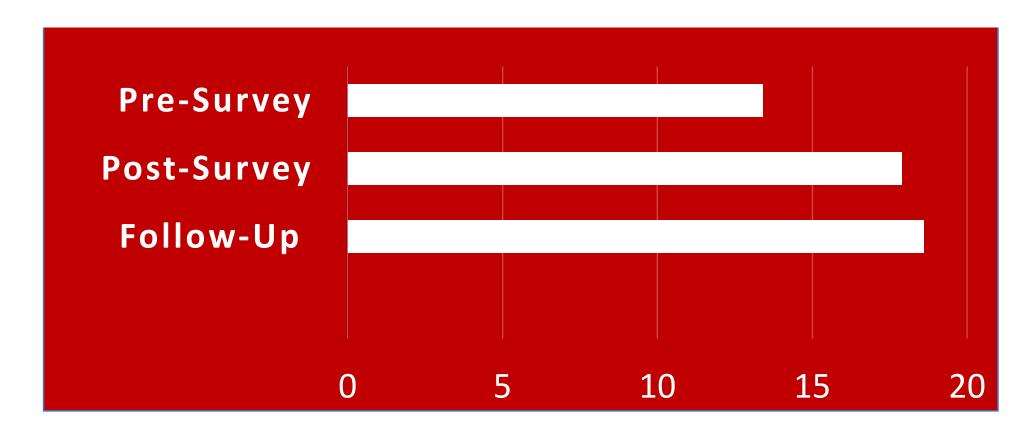
Conceptual Framework



A Wilcoxon signed-rank test conducted

 There was a statistically significant difference between Pre- and Post-test scores

Pre, Post, & Follow-Up Surveys



• A Friedman test of differences conducted to compare survey results across 3 timepoints

• There was a statistically significant **difference** among the 3 sets of survey scores

 Post-hoc tests determined that the change in scores occurred between the Pre- and Post-Survey (p < .001), and was maintained thereafter throughout the follow-up period

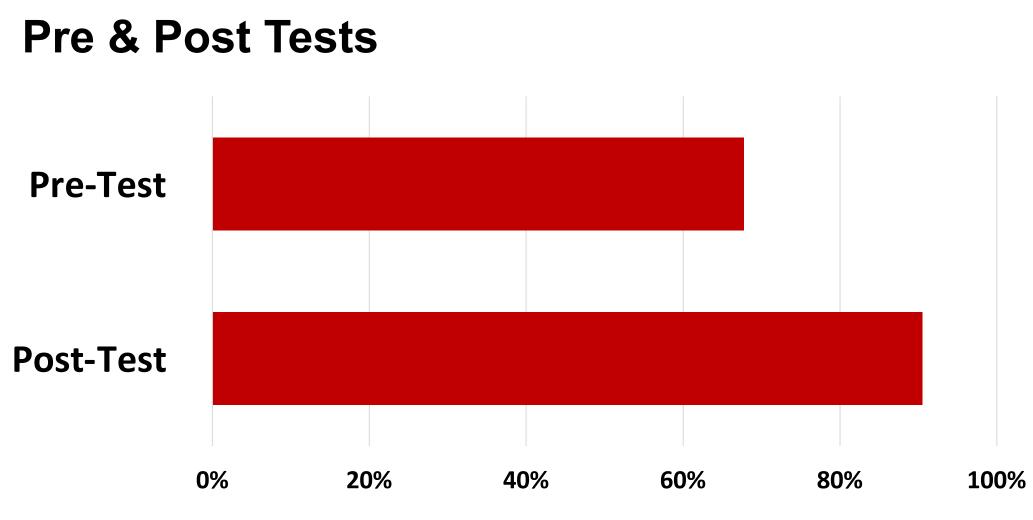
• A Wilcoxon signed-rank test conducted > Z = 3.09 with a *p*-value of .002

• There was a statistically significant change among provider responses reporting that they screened their patients for OSA from preimplementation to the follow-up time period

• Over **94%** of participants felt the intervention was efficacious and impactful in their practice

Suzanne Willard, PhD, APN, FAAN

RESULTS



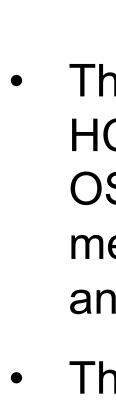
• Average scores increased by > 33%

> Z = 3.75 with a *p*-value < .001

➤ X² = 17.77 with a *p*-value < .001</p>

Patient Screenings

Overall Course Effectiveness



• The results also show a reported increase in the conducting of patient screenings

These improvements were sustained throughout the post-intervention period

Clinical Practice: The project supports improved identification and addressment of comorbid OSA among patients with mental illness

Education: The findings promote ongoing training on OSA for psychiatric HCPs and support the adoption of online, interactive educational initiatives in improving practice

Quality/Safety: The project emphasizes the indication for better detection efforts and treatment of OSA in behavioral health

industrv/

Jeannette Manchester, DNP, RN

DISCUSSION

• The results depict that presenting psychiatric HCPs with a continuing education course on OSA in behavioral health was an effective means of enhancing their knowledge/attitudes and improving practice

IMPLICATIONS

Healthcare Policy: The findings define the need for improved care coordination among disciplines

Economics: Addressing comorbid OSA in patients has a clear fiscal incentive and doing so can save costs for the entire system

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REFERENCES

American Psychiatric Association (APA). (2013). *Diagnostic and statistical manual* of mental disorders (5th ed.). Arlington, VA: Author.

Jackson, M., Becerra, B., Marmolejo, C., Avina, R., Henley, N., & Becerra, M. (2017). Prevalence and correlates of sleep apnea among US male veterans, 2005-2014. Preventing Chronic Disease, 14(E47).

Kang, J. M., Cho, S. J., Lee, Y. J., Kim, J. E., Shin, S. H., Park, K. H., Kim, S. T. & Kang, S. G. (2018). Comparison of psychiatric symptoms in patients with obstructive sleep apnea, simple snoring, and normal controls. *Psychosomatic Medicine*, *80*(2), 193-199. https://doi.org/10.1097/PSY.00000000000541 Kaufmann, C. N., Susukida, R., & Depp, C. A. (2017). Sleep apnea,

psychopathology, and mental health care. Sleep Health, 3(4), 244-249. Myles, H., Myles, N., Antic, N. A., Adams, R., Chandratilleke, M., Liu, D., Mercer, J. Vakulin, V., Wittert, G., & Galletly, C. (2016). Obstructive sleep apnea and schizophrenia: a systematic review to inform clinical practice. Schizophrenia *Research, 170*(1), 222-225. https://doi.org/10.1016/j.schres.2015.11.014 Pyle A. (2016, September 9). Sleep apnea is a hidden health crisis in the U.S. American Academy of Sleep Medicine.

https://well.blogs.nytimes.com/2008/05/06/psychiatry-handbook-linked-to-drug-

Sadock, B., Sadock, V., & Ruiz, P. (2015). Kaplan & Sadock's synopsis of psychiatry (11th ed.). Wolters Kluwer.

Salman, S. (2019). Modern management of obstructive sleep apnea (1st ed.). Springer. https://doi.org/10.1007/978-3-030-11443-5