Evaluating Potential Alcohol Misuse in a Rural Patient Health Clinic

Dr. Laurel Welty, DNP, FNP-BC
Graceland University School of Nursing, Independence, Missouri

INTRODUCTION

Misuse of alcohol accounts for 90,000 preventable deaths per year. The World Health Organization advocates for increased preventive and treatment modalities focused on reduction of alcohol consumption habits (Thomas, 2014).

CLINICAL PICO QUESTION

Among rural adult clinical patients ≥ 18 years of age (P), does the implementation of Screening, Brief Intervention, and Referral to Treatment (SBIRT) utilizing the AUDIT screening tool by medical clinic staff (I) compared to usual clinical practice (C) identify potential alcohol misuse or Alcohol Use Disorder prevalence rates (O) over 16 weeks?

PURPOSE/AIMS

The purpose of this DNP quality improvement (QI) project was implementation of the Alcohol Use Disorder Identification Test (AUDIT) screening tool as part of the SBIRT process and evaluate the potential prevalence of alcohol misuse among adult patients.

RESEARCH QUESTIONS

1. Did the mean posttest scores of medical clinic staff knowledge improve from baseline pretest scores post-educational session?
2. What was the medical clinic staff compliance rate post-implementation phase for screening eligible patients using the AUDIT tool?
3. What were the frequencies of risk level of alcohol use among clinic adult patients who were identified as low (Zone 1), high (Zone 2), and alcohol dependent (Zone 3) using AUDIT scores?
4. Were there significant differences between mean scores of two genders, patients with and without depression, patients with and without anxiety, on AUDIT scores?

METHODS

Design: Pre- and post-implementation
Setting: Two rural clinics (FQHC)
Participants: Adults ≥ 18 years of age, non-acute, convenience opportunity sample
Intervention: Staff SBIRT/AUDIT training
Tool: AUDIT screening tool
IRB: Project was approved by GU IRB

FRAMEWORK

Plan-Do-Study-Act

Agency for Healthcare Research and Quality framework for an organization to frame a structured, experimental learning approach which informs clinical practice and affects plans for change (AHRQ, 2013)

RESULTS

1. Statistically significant difference between staff pretest and post scores (p=<.001)
2. Screening compliance rate 86%
3. Of patients screened, Zone 1 92% (n=288), Zone 2 7% (n=22), Zone 3 1% (n=1)
4. Statistically significant differences were found between two genders (p=0.008) and AUDIT scores

SUMMARY

This sample population did not have prevalence of self-reported alcohol consumption at the misuse or Alcohol Use Disorder diagnostic level. It is essential to continue to screen and provide early intervention for at risk patients.

LIMITATIONS

1. Rural setting with 96.9% Caucasian
2. Non-significant findings between patients with and without depression, with and without anxiety, and AUDIT scores
3. Alcohol use was evaluated via self-report (Hawthorne effect)

Zone	AUDIT Score	Type of Drinker	Recommended Intervention
Zone 1	0-7	Abstainer/Low Risk	Patient Educational Handout
Zone 2	8-15	High Risk Drinker*	Patient Educational Handout Rethinking Drinking Booklet Consider Referral to In-House Behavioral Health Department
Zone 3	20+	Likely Alcohol Dependence	Refer Out for Treatment

Note. Data for this table from Babor & Higgins-Biddle, 2001 and Babor, Higgins-Biddle, Saunders, & Monteiro, 2001. *Scores ≥8 = alcohol misuse (Krenek et al., 2011)

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