

Substance Abuse Among Anesthesia Providers

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Abstract

Substance abuse among anesthesia providers is not a new phenomenon. It is a long established issue that has affected many anesthesia providers. Substance abuse is defined as an overindulgence in or dependence on an addictive substance, especially alcohol or drugs.

Substance abuse is considered to be one of the most consequential professional risks to anesthesia providers. Anesthesia providers are exposed to enormous amounts of stress emerging from the rigors of didactic and clinical components of anesthesia training, and continuing throughout their careers with the daily demands of anesthesia care.. It is estimated that ten to fifteen percent of all anesthesia clinicians will misuse drugs or alcohol at some time during their careers.

Substance abuse is relevant to the anesthesia profession. Therefore, a thorough understanding of chemical dependency, including clear definitions, risk factors, and treatment, is advantageous in possibly reducing its prevalence.

Project Description

Objective: Bring further awareness to nurse anesthesia students about substance abuse among anesthesia providers by presenting substantial information pertaining to anesthesia providers and their relationship to chemical dependency

- A thorough literature review of the subject was performed.
- Risk factors and current research pertaining to the subject were integrated into a 2 hour PowerPoint presentation
- Presentation: September 25, 2015
- Audience: 22 senior student nurse anesthetist students of the Adventist University of Health Sciences 2016 cohort
- Informed consents were obtained from each participant prior to the presentation/test administration. (The responses were anonymous.)
- A pre-test and post-test consisting of 10 questions were administered to evaluate the efficacy of the presentation.

Review of Literature

Major Factors Influencing the Development of Substance Abuse and Dependency Among Anesthesiologists and Nurse Anesthetists

Biological- Neurobiological, Genetics (It is thought that genetics account for about 50% of alcohol addiction).

Psychological- Comorbid psychiatric disorders, Sensation- and/or excitement-seeking personality traits.

Occupational- Stress, Medication access, Pharmacologic Knowledge, Occupational exposure.
(McGuinness et al., 2012).

Recognizing Substance Abuse in the Workplace

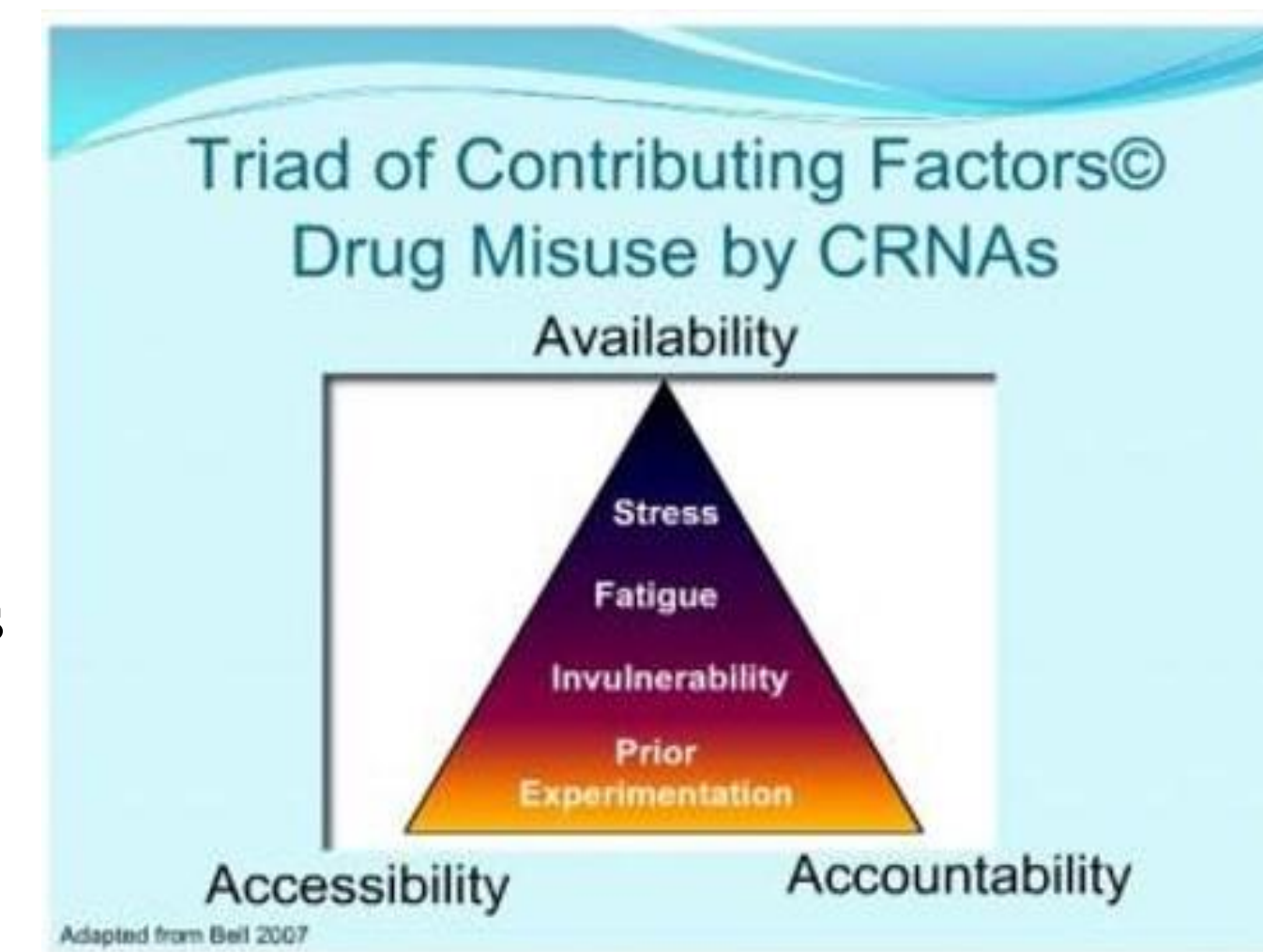
- Consistently signs out more narcotics than do peers
- Has patterns of inappropriate drug choices and doses for patients
- Changes in personal appearance
- Complaints of pain increase by patients in whom pain medication was documented but never administered
- Lapses in the quality of clinical care
- Wide mood swings
- Problems with law enforcement or authority
- Volunteers for extra cases/call
- Sloppy record keeping or dose discrepancies

Typical Drug-Abusing Nurse Profile

- Individual who graduated in the top one-third of his/her nursing class
- Advanced degree
- Works in a high stress area (i.e., emergency room)

- Often referred to as a “super nurse”

- 10% of nurse anesthetists admitted to misusing powerful anesthetic medications during their careers.
- The most common medications abused were benzodiazepines, nitrous oxide, potent opioids, and Propofol.
- The typical time frame for discovery is **1 to 1.5 years**.
- **1 out of every 10 (9.8%)** actively practicing CRNAs misuses controlled drugs; thus, it is reasonable to assume that on-the-job impairment is likely.
- **Male CRNAs with 6 to 10 years** of clinical experience have an increased risk for controlled drug misuse.
(Bell et al., 1999)



RESULTS

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-Test	4.9500	20	1.79106	.40049
	Post-Test	9.5500	20	.94451	.21120

The mean scores for Pre-Test and Post-Test are 4.95 and 9.55 respectively.

CONCLUSIONS

The t-test for paired samples was employed to analyze the data. The obtained t value is -11.315 with an associated p of <.05 which is statistically significant. It can be concluded that there is a significant difference between the Pre-Test and Post-test mean. The negative t value indicated that there is a significant increase in the mean scores.

Substance abuse among anesthesia providers is a long established issue that has affected many anesthesia providers.

Providing this supplemental evidence-based education module increased the knowledge base of the participants.

The anticipated outcome of the project was achieved.

REFERENCES

Available upon request. The references are printed on the back of the poster.