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# Website for Women Who Abuse Opioids: What Are the Essential Components?

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**Abstract.** Studies indicate opioid prevention programs should be designed differently for men and women. Since a website is an effective means of providing behavioral interventions, tailoring one to meet the specific needs of women is a logical step in assisting them to overcome opioid misuse. We identified essential components for inclusion in a website following a community engagement project.

Keywords. Opioids, opioid abuse, opioid addiction, website

#### 1. Introduction

There are significant gender differences in opioid abuse behavior [1-3]. Men tend to use opioids recreationally whereas women misuse opioids to relieve negative emotions and stress. Physiological differences, such as hormone fluctuation and pregnancy, place women who abuse opioids at an increased risk for medical problems [1,4]. Women may experience more drug cravings, more relapses, and are more prone to suffer panic attacks, anxiety, or depression [4]. This implies opioid prevention programs for women should differ from opioid prevention programs for men.

Although the delivery of information and behavioral interventions using a website is not innovative, web-based health content is often the most convenient resource for adults seeking information [5,6]. User engagement and frequency of website visits increase when content is customised to an audience. The purpose of this pilot study was to identify essential components of a customised website specifically designed to meet the needs of women who abuse opioids.

## 2. Method

Nursing students (N=10) of a community engagement project worked with women living in a Wilmington-based halfway house following opioid abuse treatment. We used the content analysis [7] technique to find common words and concepts in the students' reflection essays and categorised them into themes. The principal investigator (PI) identified repeated terms in ten essays and a researcher was invited to confirm the results.

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## 3. Results

A total of six themes were identified as essential components for a website (Table 1).

**Table 1.** Essential components identified for a website for women who abuse opioids.

Themes from Content Analysis					
Religion	Information about a halfway house	Donation	Volunteering opportunities	Information of Drug Court	Communication tools

#### 4. Conclusion and Limitations

We identified essential components to develop a meaningful website tailored to women who abuse opioids. When a website is developed using identified themes as essential components, it will better provide the information needed by women. Ultimately, this well-informed website may facilitate the rehabilitation of women in a recovery program.

We used only ten short essays to identify repeated terms. More essays would generate more themes for a website such as side effects of opioids needed to be on the website.

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## References

- [1] Back SE, Lawson KM, Singleton LM, Brady KT. Characteristics and correlates of men and women with prescription opioid dependence. Addict Behav, 2011. 36(8): p. 829-34. doi: 10.1016/j.addbeh.2011.03.013
- [2] Back SE, Payne RL, Simpson AN, Brady KT. Gender and prescription opioids: findings from the National Survey on Drug Use and Health. Addict Behav, 2010. 35(11): p. 1001-7. doi: 10.1016/j.addbeh.2010.06.018
- [3] Tuchman E. Women and addiction: the importance of gender issues in substance abuse research. J Addict Dis, 2010. 29(2): p. 127-38. doi: 10.1080/10550881003684582
- [4] NIH. Drug Facts: Substance Use in Women, 2018, National Institute on Drug Abuse.
- [5] Beck F, Richard JB, Nguyen-Thanh V, Montagni I, Parizot I, Renahy E. Use of the internet as a health information resource among French young adults: Results from a nationally representative survey. J Med Internet Res, 2014. 16(5): p. e128. doi: 10.2196/jmir.2934
- [6] Fergie G, Hunt K, Hilton S. What young people want from health-related online resources: A focus group study. J Youth Stud, 2013. 16(5): p. 579-596. doi: 10.1080/13676261.2012.744811
- [7] Waltz CF, Strickland OL, Lenz ER. Measurement in Nursing Research. 2nd ed 1991, Philadelphia: F.A. Davis Company.