

Poster 5: The relationship between history of sexual assault and cervical cancer: A meta-analysis**Presenting Author:** Kyra Hunsberger, BA – The University of Arizona College of Medicine - Phoenix

Topic: Cervical

Objectives

We aim to evaluate literature to date examining the relationship between history of sexual assault and likelihood to undergo cervical cancer screening or develop cervical cancer.

Methods

This meta-analysis was performed according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines. One MEDLINE search was conducted with the following MeSH terms: ((cervical cancer) AND (sexual assault)). There were 46 articles identified including clinical trials, randomized controlled trials, case studies, systematic reviews, quantitative studies, and qualitative studies. Inclusion criteria comprised English language randomized controlled trials and randomized or non-randomized quantitative studies published from 2000-2023 that assessed history of sexual assault or abuse and cervical cancer screening or cervical cancer. Of the articles identified, four met inclusion criteria and were analyzed. Meta-analysis was performed using the random effects model of DerSimonian and Laird, evaluating the effect size of odds ratios for studies that assessed a relationship between history of sexual assault and cervical cancer screening or cervical cancer. Risk of bias and quality assessment were performed using the ROBINS-I and GRADE tools, respectively.

Results

Of the studies identified, three analyzed a relationship between history of sexual assault and likelihood to undergo cervical cancer screening. Women with a history of sexual assault were 23% less likely (Odds ratio: 0.77; 95% confidence interval: 0.42-1.39) to undergo cervical cancer screening compared to women without a history of sexual assault, although p-value was insignificant at 0.38. Two studies analyzed a relationship between history of sexual assault and risk of cervical cancer. Women with a history of sexual assault were 2.32 times more likely to be at risk for cervical cancer compared to women without a history of sexual assault on a statistically significant level ($p < 0.05$) (Figure 1).

Conclusions

Literature suggests that sexual assault puts women at an increased risk for developing cervical cancer. Future research should identify the mechanism of association between sexual assault and cervical cancer in order to implement trauma-informed cervical cancer screening and treatment protocols in high-risk populations.

Abstract Table or Graph

