

**Article Review: DiClemente, R. J., Wingood, G. M., Harrington, K. F., Lang, D. L., Davies, S. L., Hook III, E. W., Oh, M. K., Crosby, R. A., Hertzberg, V. S., Gordon, A. B., Hardin, J. W., Parker, S., & Robillard, A. (2004). Efficacy of an HIV Prevention Intervention for African American Adolescent Girls. JAMA, 292(2), 171. DOI: [10.1001/jama.292.2.171](https://doi.org/10.1001/jama.292.2.171)**

### **Overview and Context**

The research article by DiClemente et al. (2004) investigates the effectiveness of a targeted HIV prevention intervention aimed at reducing risky sexual behaviors, lowering the incidence of sexually transmitted diseases (STDs), and preventing underage pregnancies among African American adolescent girls. The study also seeks to enhance mediators of HIV-preventive behaviors within this population, which is disproportionately affected by HIV/AIDS. The article is an important contribution to public health research, particularly in addressing health disparities among marginalized groups.

### **Structure and Presentation**

One notable feature of the article is its unconventional structure. Unlike many primary research articles, it begins with a detailed abstract, followed immediately by the methods section, without the usual introduction. This absence of a formal introduction is surprising, as it could benefit from providing important contextual background on the prevalence of HIV, the significance of the issue, and why African American adolescent girls are particularly at risk. An introduction section would help frame the study within the larger context of HIV prevention efforts and health disparities, ultimately enhancing the article's clarity and significance.

### **Methodological Strengths**

The methodological design of the study is solid. Spanning from 1995 to 2002, the research involved 522 adolescents, and the use of a randomized controlled trial (RCT) enhances the reliability and validity of the findings. RCTs are considered the gold standard for intervention studies, and this design reduces potential biases, such as the

Hawthorne effect. The intervention itself consisted of four interactive group sessions conducted by trained female educators at a family medicine clinic, which was an appropriate setting for reaching the target population.

Data collection included key outcomes like consistent condom use, sexual behaviors, STD incidence, and psychological mediators of sexual behavior, measured at baseline and at follow-ups (6 and 12 months). The use of logistic and linear generalized estimating equation regression models was appropriate for analyzing the quantitative data and accounting for both time-independent and time-dependent variables.

### **Results and Data Analysis**

The results section presents data in a straightforward and accessible format, using tables that report adjusted mean differences with 95% confidence intervals, relative change, and p-values, all less than 0.05, indicating that the intervention had a statistically significant effect. The inclusion of a table comparing the characteristics of the intervention and control groups, including sociodemographic factors and potential confounders (e.g., gang involvement, depression, pregnancy desire), adds depth to the analysis. This allows future researchers to identify possible confounding variables and adjust their methodologies accordingly.

### **Limitations**

A significant strength of the article is the inclusion of a "comment" section, which essentially functions as a discussion or limitations section. The authors acknowledge several key limitations, including the biases associated with self-reporting and the generalizability of the findings, given the relatively small sample size and short duration of the follow-up period. These limitations are important to consider when interpreting the results, especially in the context of a diverse population where long-term follow-up might reveal different outcomes.

### **Conclusion and Impact**

In conclusion, the study finds that gender-focused and culturally relevant HIV prevention interventions can enhance HIV-preventive behaviors and reduce underage pregnancy rates among African American adolescent girls. This finding is significant given the higher rates of HIV infection in this group compared to others. The research is valuable because it contributes to the growing body of evidence that supports targeted interventions tailored to the specific needs and cultural context of marginalized populations.

The article could have been improved by providing more comprehensive background information and a formal introduction. Nevertheless, its methodological rigor, clear presentation of results, and candid discussion of limitations contribute to its overall quality. The findings underscore the importance of culturally appropriate HIV prevention strategies, particularly for at-risk groups, and suggest areas for future research, such as the need for longer follow-up periods and larger, more diverse samples.

### **Final Thoughts**

Overall, this is a well-conducted study that addresses a crucial public health issue. The research provides valuable insights into the effectiveness of HIV prevention interventions for African American adolescent girls. Although the study's limitations must be taken into account, it is an important contribution to HIV prevention science and offers practical implications for the development of future interventions. The inclusion of a comment section detailing both strengths and limitations adds transparency to the research process, which is crucial for advancing the field.