

# **Improving Interventions Designed to Prevent Human Papillomavirus (HPV) Infection among College Students**

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## **Program Planning**

- Conduct formative qualitative research to understand needs and develop intervention components
- Pilot test intervention materials with the priority population before full scale implementation

## **Design**

- Employ pretest-posttest control group evaluation design to measure changes across time and make comparisons by group

## **Outcome Measures**

- Operationalize and reify theoretical constructs; measure changes in the constructs from baseline to post-intervention
- Develop or employ valid and reliable self-report tools and pre-test with priority population
- Assess impact evaluation through changes in antecedents of behavior (attitudes, beliefs, perceptions, and intentions) at post-intervention
- Evaluate more long-term intervention effects
  - ✓ 3-6 months for HPV vaccine uptake
  - ✓ 6-9 months for HPV vaccine series completion
  - ✓ 12-18 months for safer sexual behavior (e.g., 30-day condom use)

## **Theoretical Framework**

- Apply health belief model and/or theory of planned behavior constructs
  - ✓ Underscore the effectiveness of the HPV vaccine in preventing HPV infection (perceived benefits, attitude)
  - ✓ Highlight that condoms do not provide full protection from HPV (perceived susceptibility)
  - ✓ Request physicians to deliver vaccination recommendations and methods to overcome barriers to vaccination (cue to action, perceived barriers, perceived behavioral control)
  - ✓ Emphasize peer, parental, and physician approval of HPV vaccination (subjective norm)

## **Study Location**

- Develop, implement, and evaluate HPV interventions at higher education institutions in underdeveloped countries that lack screening and surveillance

## **Process Evaluation**

- Process evaluation should be applied to evaluate implementation fidelity
- Incorporate processes to determine whether materials were read, activities were completed, and/or videos were viewed
  - ✓ Include knowledge-based questions following content
  - ✓ For web-based interventions, include page access confirmation and time spent on each web page; require participants to complete a section before allowed access to the next section

## **Intervention Delivery**

- Tailor materials by gender; when targeting men, emphasize negative health outcomes that can occur in HPV infected men
- Conduct personalized assessments that inquire about demographic and psychosocial variables at baseline to implement more relevant interventions
- Design, implement, and evaluate interventions that utilize technology (e-mail, social media, text messaging, website, etc.)

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