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 that utilize technology (e-mail, social media, text messaging, website, etc.)
Salient References