A Systematic Review of Strategies to Optimize the Professional Development of Providers Disseminating Sexual Health Content to Prevent Adolescent Pregnancy

Kassandra S. Greci, MSN, APRN, WHNP-BC; Eric A. Fenkl, PhD, RN, CNE; C. Victoria Framil Suarez, DNP, APRN, ANP-BC
Florida International University

Problem Statement

Adolescent pregnancy is at an extreme rate within the United States, especially for minority adolescents of Hispanic and Non-Hispanic Black ethnicity/race, who reside within low socioeconomic geographic areas.

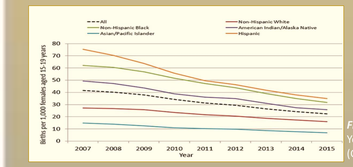


Figure 1. Births per 1,000 Females Aged 15–19 Years, by Race and Hispanic Ethnicity, 2007-2015 (Centers for Disease Control and Prevention, 2017).

Aim

Addressing adolescent sexual health education at the grass roots will further increase healthcare providers' awareness and engagement in preventing adolescent pregnancy. In turn, this will further standardize collaborative initiatives in increasing adolescent sexual health knowledge and positive decision-making.

Systematic review guided by three specific questions:

1. *What are the facilitators and barriers to prevention of adolescent pregnancy?*
2. *What are theoretical frameworks that support the prevention of adolescent pregnancy?*
3. *What are the avenues of successful memory retention for prevention of adolescent pregnancy?*

Background

The Center for Disease Control and Prevention (2017) has prioritized adolescent pregnancy due to the nearly 230,000 unintended pregnancies documented in 2015 among adolescents. Yet there has been an overall 8% decrease of adolescent pregnancy from previous years found in *Figure 1*, the decrease results from comprehensive sex education and promotion of contraceptive use, which opposes current abstinence-based curriculums within various school districts.

This creates an unprecedented responsibility for healthcare providers to properly and adequately disseminate comprehensive sex education to adolescents within the allocated time of the patient-provider visit, especially within school health clinics.

Methods and Frameworks

Articles Identified
- 1081 articles identified through database searches
- 990 articles removed after initial screening of titles

Abstracts Screened
- 91 abstracts reviewed for eligibility
- 54 articles excluded for irrelevance

Full Texts Screened
- 37 full text articles reviewed for eligibility
- 12 articles excluded for irrelevant findings or duplicate publications

Articles Included
- 18 articles included in the literature review
- 7 articles remained as potential background articles

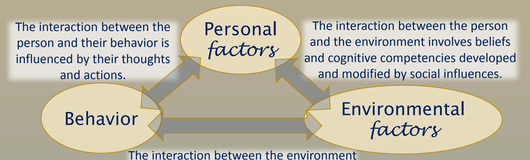


Figure 2. Concept map of the reciprocal determinism of Social Cognitive Theory of Motivation (Motivation Project, 2018).

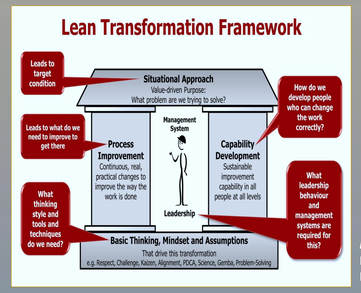


Figure 3. The Lean Transformation Framework outlining its 5 dimensions (The Lean Enterprise Academy, 2015).

Results

Sexual Health Education and Promotion

Within articles, there were statistical significance found in the improvement of sexual health knowledge attainment, regardless of whether the adolescents adhered to the sexual health practice recommendations; this demonstrated a benefit of partaking in any sexual health prevention program, abstinence-based or comprehensive.

Cognitive Development and Conceptual Framework

Within 7 articles, the use of a conceptual framework provided structure within the sexual health prevention programs and demonstrated increased significance in positive outcomes. Within the remaining articles, there were undefined use of a conceptual framework; however, the sexual health prevention programs demonstrated a somewhat informal use of the Social Cognitive Theoretical framework by using one or two of the interactions found in *Figure 2* and/or Piaget's Theory of Cognitive Development found in *Figure 5*.

Healthcare Provider role and Professional Development

As more healthcare providers partake in the role/responsibilities of a sexual health educator through interprofessional collaboration and practice implementation, there can be more opportunities for professional development on adolescent sexual health education.

Conclusions

Facilitators and barriers to the prevention of adolescent pregnancy

Though most states prefer the abstinence-based prevention programs as opposed to comprehensive sex education programs, evidence demonstrates a practice gap in addressing adolescents who may have thoughts and concerns if they choose to participate in sexual health risk behaviors (Alexander, Jemmott, Teitelman, & D'Antonio, 2015).

Comprehensive sex education programs prove to be more of a realistic approach to educating adolescents on healthy sexual health practices due to the education of barrier methods against pregnancy and other risks, should adolescents choose to partake in sexual behavior.

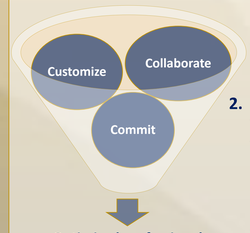
Theoretical frameworks in support of adolescent pregnancy prevention

Incorporating the Social Cognitive Theory framework within adolescent sexual health education is one key factor to honing in self-efficacy in healthy decision-making among adolescents. Further evidence-based support is demonstrated through Erikson's Stages of Psychosocial Development and Piaget's Theory of Cognitive Development.

Avenues of successful memory retention for adolescent pregnancy prevention

Interprofessional collaboration should occur between healthcare providers and school sexual health educators using the Lean Transformation framework to narrow and/or close the practice gap found within adolescent sexual health knowledge due to the limitations of the abstinence-based prevention programs provided within school settings.

Recommendations



1. **Collaborate**: Healthcare providers should *collaborate* with school sexual health educators to identify the practice gap among adolescents related to sexual health
2. **Customize**: Use the Lean Transformation and Social Cognitive Theory frameworks to *customize* adolescent sexual health education process, and to set and attain realistic expectations/goals related to practice implementation
3. **Commit**: Implement evidence-based process, and *commit* to continuous re-assessments using the Plan-Do-Study-Act (PDSA) cycle

Approximate Age	Psycho Social Crisis
Infant - 18 months	Trust vs. Mistrust
18 months - 3 years	Autonomy vs. Shame & Doubt
3 - 5 years	Initiative vs. Guilt
5 -13 years	Industry vs. Inferiority
13 -21 years	Identity vs. Role Confusion
21-39 years	Intimacy vs. Isolation
40 - 65 years	Generativity vs. Stagnation
65 and older	Ego Integrity vs. Despair

Figure 4.
Erik Erikson's Stages of Psychosocial Development (The Psychology Notes Headquarters, 2017).

Stage	Age Range	Description
Sensorimotor	0-2 years	Coordination of senses with motor response, sensory curiosity about the world. Language used for demands and catalouging. Object permanence developed
Preoperational	2-7 years	Symbolic thinking, use of proper syntax and grammar to express full concepts. Imagination and intuition are strong, but complex abstract thought still difficult. Conservation developed.
Concrete Operational	7-11 years	Concepts attached to concrete situations. Time, space, and quantity are understood and can be applied, but not as independent concepts
Formal Operations	11+	Theoretical, hypothetical, and counterfactual thinking. Abstract logic and reasoning. Strategy and planning become possible. Concepts learned in one context can be applied to another.

Figure 5.
Piaget's Theory of Cognitive Development (The Psychology Notes Headquarters, 2015).

Table 1. Synthesis Table: Articles Relevant to the PICO Elements Forming the Clinical Question.

References

FIU | Nicole Wertheim College of Nursing & Health Sciences
Florida International University