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# Application of Metatheory of Resilience in Adolescent Pregnancy and Substance Use Disorders

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<u>Purpose:</u> The purpose of the literature review was to identify factors that influence or hinder adaptation and integrate a resilience model as framework for adaptation in the pregnant adolescent population under significant stress who have Substance Use Disorders.

Adolescence is a challenging phase of human development. Characteristics of both the adolescent and environment influence response to life events. Pregnancy is a stressful life event, even more so in the context of adolescence. There is a greater probability of risk taking behavior and impulsivity (Palm & Nylander, 2014). Optimal response to stress benefits both mother and child, and resilience theory contends there is opportunity for growth with life disruptions (Richardson, 2002). Substance use disorder (SUD) can be viewed as both a cause of, and response to, stressors; it can contribute to pregnancy, and present a hazard to mother and baby. The pregnant adolescent with SUD is not well served by healthcare providers who do not understand the convergence of all three states: adolescence, pregnancy, and SUD.

**Methods**: A literature search from 2007 -2017 was conducted using PubMed PsycINFO, and CINAHL, merging the terms "teenage pregnancy", "substance use", and "outcomes". The question of focus was "What are factors that influence or hinder adaptation in the adolescent population under significant stress during pregnancy who have Substance Use Disorders?" with the objective of identifying and integrating a resilience model as a framework for adaptation in adolescent populations under significant stress during pregnancy and SUDs.

**Results**: A total of 32 peer-reviewed publications were retrieved; of which 16 matched the search criteria. The synthesis yielded common themes among factors that influence care of the pregnant adolescent with SUD: 1) Resilience involves the ability to grow or adapt to life circumstances; 2) Risk factors for the pregnant adolescent and fetus in the context of SUD; and 3) behavioral resilience of offspring after intrauterine exposure. A theoretical construct was sought to guide care of the pregnant adolescent with SUD.

The framework for Richardson's Resilience Theory was applied to provide guidance for pregnant adolescents with Substance Use Disorders. New life circumstances disrupt homeostasis and require energy to adapt and reintegrate. Interpersonal growth occurs when a person successfully resolves a disruption, but there are more disruptions during adolescence. The newness of these disruptions, with less coping skills and experience, makes adolescence more difficult. Fostering resilience requires strength and risk appraisal in the pregnant adolescent population with substance use disorder, amelioration of changeable risk factors, and enhancement of protective factors (Smith & Lipari, 2017; Elmore, Scull, and Kupersmidt, 2016; Mason et al, 2016; Liebschutz et al, 2015). These protective factors can be personal qualities or assets, or external supports.

**Conclusion**: Richardson's model provides a useful, holistic approach to this problem. Fostering resilience involves personal appraisal and improving protective factors for this at- risk population. The pregnant adolescent population sees significant stress in all realms with SUD, a potential contributing factor to pregnancy. Adaptive response to stress benefits both mother and child. Resilience theory asserts there is opportunity for improving interpersonal growth for dealing with life disruptions. Ongoing review of the literature is needed to provide the most up-to-date approach to sustain positive adaptability through protective factors and external support for this population.

### Title:

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### Keywords

Adolescent pregnancy, Resilience theory and Substance use disorders

#### References:

Elmore KC, Scull TM, Kupersmidt JB. (2017). Media as a "Super Peer": How Adolescents Interpret Media Messages Predicts Their Perception of Alcohol and Tobacco Use Norms. *Journal of Youth Adolescence*, 46(2), 376-387. http://doi:10.1007/s10964-016-0609-9 Â

Liebschutz, J. M., Crooks, D., Rose-Jacobs, R., Cabral, H. J., Heeren, T. C., Gerteis, J., . . . Frank, D. A. (2015). Prenatal substance exposure: What predicts behavioral resilience by early adolescence? *Psychology of Addictive Behaviors*, *29*(2), 329-337. <a href="http://dx.doi.org/10.1037/adb0000082">http://dx.doi.org/10.1037/adb0000082</a>

Mason, W. A., January, S. A., Chmelka, M. B., Parra, G. R., Savolainen, J., Miettunen, J., Järvelin, M. R., Taanila, A., & Moilanen I. (2016). Cumulative contextual risk at birth in relation to adolescent substance use, conduct problems, and risky sex: General and specific predictive associations in a Finnish birth cohort. *Addictive Behavior*, *58*, *16*161-6. *http://dx.doi.org/10.1016/j.addbeh.2016.02.031* 

Palm, S. & Nylander, I. (2014). Dopamine Release Dynamics Change during Adolescence and after Voluntary Alcohol Intake. *PLoS ONE, 9*(5): e96337. <a href="https://doi.org/10.1371/journal.pone.0096337">https://doi.org/10.1371/journal.pone.0096337</a>

Richardson, G. E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58(3):307-21.

Smith, K. & Lipari, R. (2017). Women of Childbearing Age and Opioids. The CBHSQ Report. Rockville (MD): Substance Abuse and Mental Health Services Administration (US). PubMed PMID: 28252898.

### **Abstract Summary:**

Fostering resilience involves personal appraisal and improving protective factors for the pregnant adolescent population, especially those with substance use. When this population utilizes adaptive responses to stress, both mother and child benefit. Resilience theory asserts opportunity for adolescents to improve interpersonal growth for dealing with life disruptions.

### **Content Outline:**

Background: Characteristics of both the adolescent and environment influence response to life events.

- 1. Pregnancy is a stressful life event, even more so in the context of adolescence.
- 2. Optimal response to stress benefits both mother and child, and resilience theory contends there is opportunity for growth with life disruptions (Richardson, 2002).
- 3. Substance use disorder can be viewed as both a cause of and response to stressors; it can contribute to pregnancy, and present a hazard to mother and baby.
- 4. The pregnant adolescent with substance use disorder is not well served by healthcare providers who do not understand the convergence of all three states: adolescence, pregnancy, and SUD.

**Methods:** A literature search from 2002 -2017 was conducted using PubMed PsycINFO, and CINAHL, merging the terms "teenage pregnancy", "substance use", and "outcomes".

- 1. What are factors that influence or hinder adaptation in the adolescent population under significant stress during pregnancy who have Substance Use Disorders?
- Adaptation in adolescent populations under significant stress during pregnancy and SUDs was linked.
- 3. Search for resilience theory was to find an applicable model in caring for adolescents who may be at-risk, pregnant, and may have SUD.
- 4. A theoretical construct was sought to guide care of the pregnant adolescent with SUD.

Results: Sixteen peer-reviewed publications were retrieved matching the criteria search.

- 1. The synthesis yielded common themes among factors that influence care of the pregnant adolescent with Substance Use Disorder: Resilience; Effects of Disruptions during adolescence; and Protective factors.
  - a. Resilience involves the ability to grow or adapt to life circumstances. New life circumstances disrupt homeostasis, and require energy to adapt and reintegrate.
  - b. Interpersonal growth occurs when a person successfully resolves a disruption, but there are more disruptions during adolescence.
  - c. The newness of these disruptions, with less coping skills and experience, makes adolescence more difficult.
  - d. Fostering resilience requires strength and risk appraisal in the pregnant adolescent population with substance use disorder, amelioration of changeable risk factors, and enhancement of protective factors.
- 2. Protective factors for the at-risk population can foster growth with life disruptions.
  - a. Protective factors include personal qualities or assets and external supports.

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**Conclusion:** Richardson's model provides a useful, holistic approach to this problem.

- 1. Fostering resilience involves personal appraisal and improving protective factors for this at-risk population.
- 2. The pregnant adolescent population sees significant stress in all three realms with SUD, a potential contributing factor to pregnancy.
- 3. Adaptive response to stress benefits both mother and child. Resilience theory asserts there is opportunity for improving interpersonal growth for dealing with life disruptions.

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**Author Summary:** Nancy Goldstein, a member of STTI, Nu Beta Chapter, has been a practicing nurse and nurse practitioner combined for over 37 years in the Johns Hopkins Medical Institutions and University. Her main areas of focus in practice, research, and nursing education have been women's and adult health and substance use disorders. In addition, over the past several years, Dr. Goldstein has coordinated the pre-licensure nursing student practicum placements for their program.

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**Author Summary:** Dr. Cynthia Carbo is dedicated to promoting the growth and development of the next generation of nursing professionals. A clinical specialist in adult mental health nursing, her particular areas of interest are geriatric mental health nursing and affective disorders including depression and suicidal tendencies. The cyclical nature of mental disorders offers Dr. Carbo the opportunity to engage patients and families over time and work with both to plan and promote individualized ongoing care and treatment.