

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

A Program Evaluation of the Nurse-Family Partnership: How Therapeutic Relationships Foster
Resiliency in First-Time Mothers

A graduate project submitted in partial fulfillment of the requirements

For the degree of Master of Social Work

By

Lesly Sibrian

in collaboration with

Brenda Galvez

May 2022

The graduate project of Lesly Sibrian is approved:

Dr. James T. Decker

Date

Dr. Eli E. Bartle

Date

Dr. Judith A. DeBonis, Chair

Date

California State University, Northridge

Acknowledgement

This project is dedicated to our family. Your support over the years has encouraged us to pursue our goals and aspirations. Thank you.

Table of Contents

Signature Page	ii
Acknowledgements	iii
Abstract	v
Introduction	1
Aims and Objectives	2
Literature Review	3
Method	10
Results	13
Discussion	18
References	20
Appendix A: Logic model graphic	23

Abstract

A Program Evaluation of the Nurse-Family Partnership: How Therapeutic Relationships Foster Resiliency in First-Time Mothers

Lesly Sibrian

Master of Social Work

Teenage pregnancy, planned or unplanned, can result in increased stressors for adolescent mothers. Such experiences can include but are not limited to lack of support, exclusion from social environments, and lack of access to resources. Programs such as the Nurse-Family Partnership provides first-time mothers with services that positively influence their families' lives and promotes resiliency. The purpose of this project was to evaluate the Nurse-Family Partnership program utilizing the logic model. The objective of the evaluation was to examine the program's in-home visiting practice by analyzing reports of the mothers and NFP nurses to explore the relationship between them. The methodology consisted of a literature review of existing research, public testimonials from nurses and mothers, and a program evaluation of the NFP program using the logic model. The results found that activities of the NFP are consistent with the activities that promote a therapeutic relationship and foster resiliency in first-time mothers.

Keywords: Teenage pregnancy, Nurse Family Partnership, NFP nurses, therapeutic relationships, resiliency.

Introduction

Since the year 1991, it has been estimated that 1 in 1,000 females aged 15-19 years old become pregnant each year (Centers for Disease Control, 2020). Though US birth rates have declined significantly over the past three decades, it appears that teenage pregnancies continue to significantly impact adolescent females. Further, the Centers for Disease Control (2020) reports that the teen birth rate in the United States is substantially higher than in other western industrialized nations and racial and ethnic, and geographic disparities persist.

According to Payne and Anastas (2015), teen childbearing is highest among young women of color in low-income neighborhoods. While adolescents from low-income communities encounter several environmental stressors, those who experience teenage pregnancy may experience stressors such as financial hardships, poor mental health, a lack of social support, and may drop out of school. Teenage mothers may have also had some exposure to trauma in their life. Research indicates that low-income pregnant teens often report a higher number of adverse childhood experiences which are strongly correlated to the likelihood of becoming pregnant as a teenager and experiencing negative social outcomes (Anastas et al., 2020).

Due to contributing factors impacting teenage mothers, these experiences have the potential to negatively influence the developmental trajectory of adolescent females and their infant child. Challenges may include health risks for the infant such as low birth weight, premature birth, and fetal and infant mortality whereas mothers may experience challenges such as maternal income, educational attainment, employment prospects, and mental and physical health (Payne & Anastas, 2015). However, positive factors such as family and partner support can serve as protective factors (Payne & Anastas, 2014). Though natural support systems can be

of great support to first-time mothers, some adolescent mothers may lack support, be excluded from social environments, and lack access to resources. When such is the case, public health programs like Nurse-Family Partnership can serve as a resource that can build resilience in first-time mothers. The Nurse-Family Partnership program is an evidence-based program designed to provide ongoing support to low-income, first-time mothers through home visitations led by trained health professionals such as nurses (Smyth & Anderson, 2014). Through this continuous interaction between nurses and mothers, nurses can provide guidance and support to promote positive outcomes for first-time mothers and their children.

Aims and Objectives

The purpose of the present graduate project is to evaluate the Nurse-Family Partnership program and to examine the mothers' experiences to determine what ensures the program's continued success. This success is defined by the mothers' ability to have healthy pregnancy outcomes, positive child outcomes, and economic self-sufficiency. More specifically, this study intends to examine the program's in-home visiting practice by analyzing reports from the mothers and NFP nurses to explore the relationship between them. Given the limited research conducted on the experiences of mothers and nurses in the program, this study utilized testimonials provided by the NFP website to highlight the value of the relationship between the mothers and NFP nurses through their narratives.

Literature Review

Pregnant teens are often referred to the Nurse-Family Partnership program through their primary care provider, a social worker, or other community resources. The NFP program is an evidence-based program designed to provide continued support to low-income, first-time mothers through home visitations led by trained healthcare professionals such as nurses (Smyth & Anderson, 2014). The three primary goals of the NFP program are to improve pregnancy outcomes, improve the development and health of the child, and improve families' economic self-sufficiency. Though much is known about the program's ongoing success, little is known about the process it takes to become successful. Research conducted by Beasley et al. (2017) and Landy et al. (2012) suggests that the NFP program's success is due to the nurses' development of the therapeutic relationship with the mother and found that the nurses' characteristics promote this positive relationship.

The literature review addresses four areas related to the importance of the relationship between first-time mothers and NFP nurses. The first section of the literature review focuses on the causes of attrition from the program. The second will discuss mothers' perspectives and what they believe makes a positive therapeutic relationship with nurses. The third will report on nurses' perspectives of relationships with first-time mothers in the NFP program and will discuss what nurses believe are factors that make up a positive relationship. Finally, the last section of the literature review will address the characteristics of the NFP nurse that contributes to establishing and maintaining a therapeutic relationship with first-time mothers.

Given that the NFP nurses begin home visitations before the twenty-ninth week of pregnancy and extend to the child's second birthday, it is important to examine the relationship between nurses and mothers as the nurses spend a majority of time with mothers during

pregnancy and post-pregnancy. It is assumed that the most influential periods to provide expectant mothers with prevention and parenting services are during prenatal and early postnatal periods. By providing services to expectant mothers, NFP has the potential to positively impact the child and maternal outcome.

However, despite the program's guaranteed success, some research reports moderate to high attrition rates from the NFP program. O'Brien et al. (2012) studied participant attrition in the NFP program over a three-year time period and found that 38-70% of families were dropping out of services between program enrollment and the child's second birthday. Further, his research consisted of understanding the predictors for attrition. Though his study acknowledged that there are several factors associated with attrition—such as moving out of the service area, no longer needing services, death, or loss of child custody—a significant finding from his study suggested that program attrition was also associated with poor relationships between nurses and mothers (O'Brien et al., 2012).

Attrition

Further studies have produced similar findings to O'Brien et al. (2012). For example, a study conducted by Beasley et al. (2017) examined engagement and attrition in the NFP program from the perspectives of the NFP nurses and mothers to identify how to enhance service delivery. His study indicated that program attrition was a result of families not receiving important program resources. More specifically, his study found that there were three general themes that addressed participant disengagement and attrition from the NFP program. One theme that emerged included life demands that served as a barrier to engagement. A second theme included turnover rates as some mothers reported that the program changed nurses who were assigned to them, at times without informing them (Beasley et al., 2017). Lastly, a significant theme related

to the nurses' approach as mothers described that the negative characteristics of the NFP nurse were what hindered engagement (Beasley et al., 2017).

As a result of these findings, Beasley et al. (2017) suggested that the hiring process of NFP nurses should consider nurse personality and approach in addition to experience and training in order to enhance service delivery. By adapting services to better address the individual needs of mothers, the program can overcome participation barriers. The positive qualities of the nurses and the services of the program are key factors that should be taken into consideration to enhance and promote the engagement of mothers in the program. The mothers' experiences offer insight into how the program provides and delivers services and the steps that NFP nurses take to ensure that they are positively impacting and reflecting the program's mission.

Mothers' Experiences

Though there have been a limited number of studies that have explored the experiences of first-time mothers participating in nurse home visiting programs, a study conducted by Landy et al. (2012) explored and described mothers' experiences participating in the NFP Program. He found that mothers' experiences were heavily influenced by the qualities and characteristics of the NFP nurses' personality. His findings suggested that there are six subthemes described by mothers that promote a positive therapeutic relationship. The subthemes include: "(1) the nurses' personality; (2) the NFP nurse is "like a friend" who supports you; (3) the NFP nurse is respectful and trusting; (4) the NFP nurse is empowering and an advocate; (5) the NFP nurse is an honest expert; and (6) NFP nurse is easy to access when you need help" which are key elements to establishing and maintaining a therapeutic relationship (Landy et al., 2012, p. 4). As indicated in Beasley et al. (2017), engaged mothers discussed the importance of the NFP nurses

in maintaining participation in the program, and factors that encouraged their engagement and participation consisted of the characteristics and personality of the NFP nurse, support from the NFP nurse, and the approach of the NFP nurse. As a result, these qualities were found to strengthen the therapeutic relationship between mothers and NFP nurses as mothers feel as if their nurse is a source of support and information.

Nurses' Experiences

Nurses' experiences are equally as important as mothers' experiences when examining the therapeutic relationship between them. Nurses often find it empowering to embark on their client's pregnancy journey. As indicated by O'Brien (2012), NFP nurses have emphasized the importance of developing a strong therapeutic relationship with program participants as this enhances the effectiveness of the services they provide. When discussing the importance of the relationship with their client, nurses have emphasized that meeting the needs of young mothers and developing positive character traits increases the bond between nurse and client and decreases the program's attrition rates. Common strategies that the NFP nurses utilize to establish trust include assuring mothers that information shared is confidential, involving family members in the home visits, sharing selective information about their own experiences and challenges as a parent, and modifying their strategies for delivering program content in accordance with mothers' needs (O'Brien et al., 2012). By utilizing these strategies, nurses have been met with positive interactions and have had an overall positive experience with their clients.

Similar experiences of the NFP nurses and the therapeutic relationship with their clients have also been reported in other studies. Dmytryshyn et al. (2015) studied the challenges and perceived benefits experienced by NFP nurses and found that despite challenges such as staff turnover and burnout, nurses described transforming their practice by utilizing a client-centered

approach in which the client is the expert in their own life. In addition, this study also suggests that the nurse is the intervention given their educational background, knowledge of maternal and child care, and expertise in forming therapeutic and empathetic relationships, therefore, making them well-equipped to deliver services (Dmytryshyn et al., 2015). The NFP program not only transforms the lives of their clients but also transforms the lives of the nurses as they have reported experiencing growth in a professional capacity and providing care to clients they were previously unable to reach, which brought a deeper sense of connection to the client (Dmytryshyn et al., 2015).

Characteristics that Promote a Therapeutic Relationship

Although the therapeutic relationship consists of both NFP nurses and mothers, the NFP nurse is viewed as the intervention in service delivery therefore it is the nurses' responsibility to initiate, implement, and develop a therapeutic relationship. Nurses possess numerous personality traits that positively influence the therapeutic relationship with young mothers. As previously mentioned, there were common findings in Landy et al. (2012) and Beasley et. al (2017) studies stating that the nurses' personality was a great predictor of mothers' engagement in the program. According to Landy et al. (2012), NFP nurses are of high value to mothers when they are identified as having an easy-going personality, are their primary source of social and emotional support, and are respectful and trustworthy. Mothers who can trust their NFP nurses are empowered to disclose and discuss information, and when the relationship has a sense of trust, it indicates that the nurses are non-judgmental and help mothers to become empowered and resilient.

In addition, when nurses act as advocates, it also strengthens the therapeutic relationship with first-time mothers. NFP mothers have suggested that setting their own learning goals,

scheduling their visits, and being advocated for when working with community agencies are all factors that instill empowerment in them (Landy et al., 2012). Furthermore, NFP nurses are not only trained, but they also have an educational background as well as personal experience that guide them in being experts which communicates to mothers that the nurse is knowledgeable. Lastly, the availability of the NFP nurse is also critical to the therapeutic relationship as first-time mothers, especially teenage mothers, require support and assistance. When NFP nurses are accessible through telephone and home visits, mothers view their nurses as reliable and this further strengthens the therapeutic relationship (Landy et al., 2012). As a result of these characteristics, mothers feel supported and confident about their success in parenting. Therefore, this type of positive relationship allows NFP nurses to connect with their clients and inspire them to reach their full potential as a parent and individual.

In summary, the importance of the therapeutic relationship between first-time mothers and nurses from the Nurse-Family Partnership program is critical as young mothers are impacted by a variety of social stressors and often lack the appropriate services and support. As evidence suggests, nurses play a vital role in the mother's life and have the potential to make a negative or positive impact. Findings from the literature review suggest that mothers often drop out of the NFP program due to not feeling connected to their nurse. Previous research also indicates that the success of the program lies within the quality of the relationships between NFP nurses and mothers. Though the NFP program has proved to be successful, few studies have examined mothers' experiences in this program which is critical as the main component of this program encompasses therapeutic relationships between nurses and first-time mothers. Therefore, based on limited research examining mothers' experiences and the relationships between nurses and first-time mothers, this graduate project will conduct a program evaluation using the logic model

to examine the therapeutic relationship between NFP nurses and mothers and what nurse characteristics influence this relationship.

Method

This project utilized the logic model to evaluate the Nurse-Family Partnership Program. The logic model is best suited to our evaluation of focus as this study intends to focus on the impact of program participants.

Background

The NFP program was founded and established in 2003 by the National Service Office (NSO) after three decades of randomized controlled trials. The NFP developed a home-visiting program for first-time mothers and families beginning during pregnancy and continuing through the child's 2nd year of life (Olds et al., 2013). Through the home-visiting program, trained NFP nurses help mothers improve their prenatal health, support parents' early care of their children, support mothers with subsequent pregnancy planning, education, and work in ways that are consistent with parents' values and aspirations (Olds et al., 2013).

Input

Inputs in the logic model describe the activities, services, and strategies that will be delivered as part of implementing the program (Nemeth, 2018). Existing public records were used to determine program resources. Resources included the NFP 2019 annual report (Nurse Family Partnership, 2019) and the NFP website including narratives (Nurse Family Partnership, 2022). A logic model shows a logical relationship among the resources that are invested, the activities that take place, and the benefits or changes that result (Nemeth, 2018). Further, a logic model helps determine when and what to evaluate so that evaluation resources are used effectively and efficiently and it is designed to show the relationships between inputs, outputs, and outcomes (Nemeth, 2018).

Output

The output is activities, services, events, and products that reach individuals, groups or agencies who participate (Nemeth, 2018). Program activities are outlined in the NFP website and fact sheets published on the NFP website. NFP's mission statement and information from prior research provides insight as to why NFP provides specific program activities.

Outcomes

The outcomes in the logic model are the direct results or benefits for individuals, families, groups, communities, organizations, or systems (Nemeth, 2018). Various types of outcomes are included such as short term, medium term, and long term. Short term outcomes are the initial expected changes in the target population after implementing specific activities and interventions whereas medium term outcomes are interim results that provide a sense of progress toward attaining the long term outcomes (Nemeth, 2018). Lastly, long term outcomes are achieved after the program has been in place over time (Nemeth, 2018). Expected outcomes of the NFP program are described in the 2019 annual report, mission statement, and NFP website. Additional expected outcomes are provided in the literature review, testimonials, and fact sheets published by the NFP website.

Assumptions

Assumptions in the logic model are beliefs about the project of reform, the participants, and how the process will work (Nemeth, 2018). It includes ideas about the existing situation, project operations, expected outcomes, the participants, and resources (Nemeth, 2018). NFP outputs and activities are connected to expected outcomes using data obtained from prior research.

Context/Situation

The Nurse-Family Partnership program is a non-profit organization operating in the United States. Nurse-Family Partnership is an evidence-based, community health program focused on transforming the lives of low-income, first-time mothers and their children (Nurse-Family Partnership, 2021). Mothers in need of the program typically require social and emotional support, access to care, information pre and post pregnancy, and economic support. The Nurse Family Partnership Annual Report (2019) provides context for the participants of the program. The annual report details the number of mothers served annually as well as demographics such as age, gender, ethnicity, and socioeconomic status of NFP participants.

Results

For a visual of the components of the NFP program, please see Appendix A for the logic model. The logic model used in this project describes the NFP program generally, with an emphasis on relationships between mothers and NFP nurses.

Core Educational Course for Nurses

The initial activity of the NFP program engages nurses by requiring them to complete NFP core education upon hiring. Olds et al. (2013) reports that core education courses for NFP nurses will guide nurses' service delivery and will promote flexible collaboration between nurses and families to meet each family's needs. The six-month course consists of three units designed to teach the skills needed to establish a successful therapeutic relationship with clients (Nurse-Family Partnership, 2022). The expected outcome is for nurses to utilize the skills learned in their practice with mothers. Nurses are trained in skills such as program theories, model elements, development of a therapeutic relationship, domains of care, reflective practice, parenting, cultural responsiveness, engaging and enrolling clients, and nursing assessment. The long-term outcome expects that nurses will provide ongoing supportive practice to ensure that therapeutic relationships with mothers are being built. To ensure this outcome, NFP nurses are supported by Nurse Supervisors (NS) who oversee them. The evidence to support this activity is strong as NFP nurses have provided testimonials about their experience with professional development.

Nurse testimonials published by the NFP website reported the ways in which nurses utilize the skills learned in the core education course. Common themes included the nurse gaining leadership skills and practice skills. NFP nurse, Sara, reported that she is challenged within this program to continuously address new things. She reports that she is challenged by

constantly learning of potential challenges that moms face and feels as though she is equipped with the best information to help them make informed decisions to move ahead positively (Nurse-Family Partnership, 2022). Further, NFP nurse, Michelle, reported that NFP gave her a good base to advocate for clients and make system changes. She also reported that every pregnant woman is going to have better care now because we started asking questions (Nurse-Family Partnership, 2022).

Home Visitations

The second activity provided by the NFP Program is home visitations. Nurses engage mothers by providing knowledge on prenatal development (Landy et al., 2012). The nurse is responsible for maintaining the highest standards in clinical nursing practices and adherence to the NFP Program model, policies, and procedures. During this time of home visitations, it is crucial to develop therapeutic relationships, utilizing concepts of reflection and motivational interviewing with women and their families in a home visiting environment. This allows the nurses to develop these therapeutic relationships and provide ongoing social and emotional support, as well as education. The long-term outcome is that the nurses will maintain lasting relationships with clients by improving maternal and child life courses. The mothers' testimonials published by the NFP website validate the importance of this activity.

Common themes found included mothers feeling empowered and knowledgeable. One of the graduated NFP mothers, Amber, reported that her nurse gave so much to her with every visit. She also reported that she would like more mothers to have access to their own personal nurse to help them on their journey into motherhood and overcoming whatever obstacles stand in their way (Nurse-Family Partnership, 2022). Another NFP graduate, Alicia, reported that she was a first-time mom and didn't know what she was doing. She shared that it was good to get all the

help she could, especially from her NFP nurse. She reported that when her NFP nurse came to the house, it was awkward at first, but now she considers her part of her family (Nurse-Family Partnership, 2022). Thus, highlighting how impactful the therapeutic relationship was to her and her family.

Pregnancy Outcomes

One of the primary activities of the NFP program is to improve pregnancy outcomes. The NFP nurses use their skills and expertise to detect early warning signs of health problems during pregnancy. The purpose of this activity is to educate mothers on preventive health and prenatal practices to promote healthier pregnancies and birth outcomes. By doing so, there is a reduction in maternal and child mortality due to the social and emotional support that the mothers receive from the nurses.

Research supports this activity as NFP nurses ensure that women experiencing possible health complications are seen by appropriate health care providers and that appropriate follow up care is completed. The NFP Program Maternal and Child Health Outcomes fact sheet (2020) cites that 35% of fewer cases of pregnancy-induced hypertension, 18% fewer preterm births, and 79% reduction in preterm deliveries among women who smoke cigarettes. In support of this activity, testimonials published on the NFP website have been given by NFP program mothers. One of the NFP graduating mothers, Ashunti, reported that the NFP program made sure that she had a safe and healthy pregnancy. She reported that without the support of her NFP nurse, she would probably not have made it as far as she did (Nurse-Family Partnership, 2022). Another NFP graduating mother, Elizabeth, reported that the nurses play a critical role in helping guide moms and providing education so they can make choices themselves toward having a healthy baby and a good life (Nurse-Family Partnership, 2022).

Health and Development of Child

The Nurse-Family Partnership program provides more than just support to mothers; it also plays a vital role in the development of the child. This activity focuses on the positive impacts that the NFP program plays on a child's development. During this time nurses provide coaching for the mothers that will teach them about the health and development of their child. The expected outcomes are reducing illness and injury, increasing parenting abilities and confidence for a strong mother and child connection, and to improve the nutrition for healthy growth and development.

Research supports this activity by providing data on the positive impacts the NFP program has played on the child's development. As stated on the NFP Program Maternal and Child Health outcomes fact sheet (2020), research supports that short term outcomes show that there is a 50% reduction in language delays and 48% fewer incidences of abuse and neglect. Long term outcomes report that children are 3 times more likely to graduate from high school with honors, 57% fewer lifetime arrests, and 28% are less likely to have depression or anxiety at age 12. The evidence to support this activity is strong as mothers have provided testimonials about their child's development.

NFP participant, Victoria, reported that she is confident that her son will be a leader in anything he does. She also reported that she is so proud of her son, and is thankful for everything Nurse- Family Partnership did to influence our journey (Nurse-Family Partnership, 2022). NFP participant, Amanda, also reported similar experiences. She reported her son is smart, laughs all the time, has a lot of personality, has no developmental problems, and no physical problems as a result of her NFP nurse working collaboratively with her to ensure her son's growth and development (Nurse-Family Partnership, 2022).

Families' Self-Sufficiency

The NFP program's final activity is based on the NFP goal of improving the lives of low-income families. This activity focuses on the betterment of the families' economic self-sufficiency by empowering the woman as an individual. NFP nurses aid in increasing economic self-sufficiency by helping the mothers plan for future pregnancies, setting goals, and pursuing education and employment. Additional intended outcomes are to have nurses facilitate these decision-making moments with the mothers to improve their self-sufficiency. Research supports this activity as the NFP Maternal and Child Health Outcomes Fact Sheet (2020) cites that mothers are twice as likely to be employed by the child's second birthday. The NFP website also reports that there is a 10% increase in earning a high school diploma or GED one year after enrolling. Additional lasting impacts after graduating from the program include, 20% of mothers spend less time on welfare and 30% of the mothers are more likely to be married over the 18-year period (Nurse Family Partnership, 2019).

In support of this activity, testimonials by NFP mothers have been published on the NFP website. As stated by one of the graduating mothers, Megan, she reported that she had never had anyone ask her what she aspired to be before until her NFP nurse inquired (Nurse-Family Partnership, 2022). She further reported that once her NFP nurse helped her with decision-making about the future, setting goals and achieving them became a reality and a practice. Another NFP participant, Kayla, reported that her nurse helped her set personal goals, a timeline for achieving them, and helped her track her progress (Nurse-Family Partnership, 2022). As a result, mothers reported feeling more confident and equipped to maintain their self-sufficiency.

Discussion

Major Findings

An overall major finding that was consistent throughout mothers' testimonials was their positive experience with their NFP nurse. Mothers generally reported that they had a positive relationship with their nurses as nurses provided social and emotional support, education, and empowerment. This relationship was a result of consistent home visitations which allowed the nurse and mother to build a therapeutic relationship.

Implications for social work practice (micro mezzo macro) research and education

At the micro level, the findings from this study demonstrate the importance of building rapport and establishing therapeutic relationships as this promotes positive impacts in clients' lives. Establishing therapeutic relationships allows for nurses to effectively provide treatment and services. At the mezzo level, the findings provide insight into how programs can improve and implement trainings and education that will further enhance the professional expertise of practitioners. As a result, this will enhance the services provided to groups, families, and communities. Lastly, at the macro level, advocating on behalf of underserved populations such as those mentioned in this study can influence policymakers and the directors of programs such as the NFP to evaluate and make necessary changes to the program that will ensure program success and effectiveness.

Strengths of the study

One strength of this study was that it examined the factors that contribute to the establishment of therapeutic relationships such as training and education that NFP nurses undergo. The examination of the NFP nurse education provided insight into how nurses are guided to practice and how they implement effective service delivery. A second strength was that

this study utilized mothers' testimonials to determine their experiences as a result of nurse-client relationships through home visitations. The testimonials provided by mothers who graduated the program provided insight into how meaningful the therapeutic relationship is between nurses and mothers. Further, testimonials described how this positive relationship contributed to impactful changes in the mothers' lives.

Limitations

One limitation of this study was that it did not consider other factors that may impact a therapeutic relationship such as barriers or negative experiences. It also only considered mothers' experiences as opposed to fathers' experiences or families' experiences as a whole. Further, this study did not examine whether positive impacts on the mother had any impact on the child or family.

Future Studies

Further studies should examine both positive and negative factors that may enhance or harm the therapeutic relationship between nurses and mothers. Such studies would allow for further evaluation on how NFP nurses can improve their service delivery or make necessary changes to the program curriculum. In addition, further studies should account for the families experience as a whole as opposed to solely focusing on the mothers' experience. In the case where mothers live in a single household, further studies should focus on other possible support systems available to the mother. Lastly, further studies should also account for nurses' experiences, both positive and negative. This will provide a better understanding of nurses' perspective on therapeutic relationships and service delivery.

References

- Anastas, J., Payne, N., & Ghuman, S. (2021). Adverse childhood experiences and complex post-traumatic stress in pregnant teens: A pilot study. *Maternal and Child Health Journal*, 25(5), 741–750. <https://doi.org/10.1007/s10995-020-03041-y>
- Beam, R. J., O'Brien, R. A., & Neal, M. (2010). Reflective practice enhances public health nurse implementation of nurse-family partnership. *Public Health Nursing (Boston, Mass.)*, 27(2), 131–139. <https://doi.org/10.1111/j.1525-1446.2010.00836.x>
- Beasley, L. O., Ridings, L.E., Smith, T. J., Shields, J. D., Silovsky, J. F., Beasley, W., & Bard, D. (2017). A qualitative evaluation of engagement and attrition in a nurse home visiting program: From the participant and provider perspective. *Prevention Science*, 19(4), 528–537. <https://doi.org/10.1007/s11121-017-0846-5>
- Centers for Disease Control. (2021). *About teen pregnancy*. Centers for Disease Control and Prevention. Retrieved from <https://www.cdc.gov/teenpregnancy/about/index.htm>
- Dmytryshyn, A. L., Jack, S. M., Ballantyne, M., Wahoush, O., & MacMillan, H. L. (2015). Long-term home visiting with vulnerable young mothers: an interpretive description of the impact on public health nurses. *BMC Nursing*, 14(1), 12–12. <https://doi.org/10.1186/s12912-015-0061-2>
- Ingoldsby, E. M., Baca, P., McClatchey, M. W., Luckey, D. W., Ramsey, M. O., Loch, J. M., Lewis, J., Blackaby, T. S., Petrini, M. B., Smith, B. J., McHale, M., Perhacs, M., & Olds, D. L. (2013). Quasi-experimental pilot study of intervention to increase participant retention and completed home visits in the nurse-family partnership. *Prevention Science: The Official Journal of the Society for Prevention Research*, 14(6), 525–534. <https://doi.org/10.1007/s11121-013-0410-x>

- Landy, C.K., Jack, S. M., Wahoush, O., Sheehan, D., & MacMillan, H. L. (2012). Mothers' experiences in the Nurse-Family Partnership program: A qualitative case study. *BMC Nursing*, *11*(1), 15–15. <https://doi.org/10.1186/1472-6955-11-15>
- Nemeth, J. (2018). *Tools for Planning & Implementing Program Evaluation*. OSU Opioid Innovation Fund Learning Series. Ohio State University College of Public Health. [file:///C:/Users/Brenda/Downloads/OIF-Evaluation-Seminar-References-and-Slides%20\(1\)%20extracopy%20-1.pdf](file:///C:/Users/Brenda/Downloads/OIF-Evaluation-Seminar-References-and-Slides%20(1)%20extracopy%20-1.pdf)
- Nurse-Family Partnership. (2019). Annual report 2019: Impact that reaches beyond one nurse, one mother, one baby. <https://www.nursefamilypartnership.org/wp-content/uploads/2020/07/annual-report-2019.pdf>
- Nurse Family Partnership. (2020). *About US - Maternal and Child Health Outcomes*. Nurse Family Partnership. Retrieved from <https://www.nursefamilypartnership.org/wp-content/uploads/2020/03/NFP-Maternal-and-Child-Health-Outcomes.pdf>
- Nurse-Family Partnership. (2022). *Moms Archives - Nurse-Family Partnership*. Nurse. Retrieved from <https://www.nursefamilypartnership.org/blog/stories/moms/>
- Nurse-Family Partnership. (2021). *About US - Nurse-Family Partnership*. Nurse. Retrieved from <https://www.nursefamilypartnership.org/about/>
- O'Brien R., Moritz, P., Luckey, D. W., McClatchey, M. W., Ingoldsby, E. M., & Olds, D. L. (2012). Mixed methods analysis of participant attrition in the Nurse-Family Partnership. *Prevention Science*, *13*(3), 219–228. <https://doi.org/10.1007/s11121-012-0287-0>

- Olds, D. L. (2012). Improving the Life Chances of Vulnerable Children and Families with Prenatal and Infancy Support of Parents: The Nurse-Family Partnership. *Intervención Psicosocial*, 21(2), 129–143. <https://doi.org/10.5093/in2012a14>
- Olds, D., Donelan-McCall, N., O'Brien, R., MacMillan, H., Jack, S., Jenkins, T., Beeber, L. (2013). Improving the nurse-family partnership in community practice. *Pediatrics (Evanston)*, 132 Suppl 2(Supplement_2), S110–S117. <https://doi.org/10.1542/peds.2013-1021I>
- Payne, N., & Anastas, J. W. (2015). The mental health needs of low-income pregnant teens: A Nursing–Social Work Partnership in Care. *Research on Social Work Practice*, 25(5), 595–606. <https://doi.org/10.1177/1049731514545656>
- Smyth, S., & Anderson, G. (2014). Family Nurse Partnership: Meeting the needs of teenage mothers. *British Journal of Midwifery*, 22(12), 870–875. <https://doi.org/10.12968/bjom.2014.22.12.870>
- Williams, V., Franco, C. Y., Lopez, C. C., Allison, M. A., Olds, D. L., & Tung, G. J. (2021). A qualitative study of mothers' perspectives on enrolling and engaging in an evidence-based nurse home visiting program. *Prevention Science*, 22(7), 845–855. <https://doi.org/10.1007/s11121-021-01260-5>

Appendix A

Nurse-Family Partnership Logic Model

SITUATION:
 The Nurse-Family Partnership program is a non-profit organization operating in the United States. Nurse-Family Partnership is an evidence-based, community health program focused on transforming the lives of low-income, first-time mothers and their children.

PRIORITIES:
 Nurse-Family Partnership positively transforms the lives of vulnerable babies, mothers, and families by empowering first-time moms to create better futures for themselves and their babies. NFP envisions a future where all children are healthy, families thrive, communities prosper and the cycle of poverty is broken. NFP nurses focus on six domains to ensure service delivery: personal health, environmental health, friends and family, the maternal role, use of health care and human services, and maternal life course development.

INPUTS	OUTPUTS		OUTCOMES		
	Activities	Participants	Short-term	Medium-term	Long-term
Budget: An annual budget of \$15.1 million from the National Service Office (NSO). Staff: Nurse Home Visitors (NHV), Nurse Supervisors (NS), administrative support, volunteers.	1. Core Education Courses and Supervisory Courses 2. In-Home Visitation	1. NFP Nurse Home Visitors (NHV), Nurse Supervisors (NS) 2. Nurse Home Visitors, Mothers, and Children	1. Nurses are educated on the NFP nursing practice and NS are educated on the supervisor role. 2. Nurses receive a caseload of clients and meet with mothers.	1. NHV and NS implement the skills and knowledge learned in their courses. 2. Nurses develop therapeutic relationships and provide ongoing social and emotional support, as well as education.	1. NHV provides ongoing supportive practice and develops therapeutic relationships with mothers. 2. Nurses maintain lasting relationships with clients by improving maternal and child life course.

INPUTS	OUTPUTS		OUTCOMES		
	Activities	Participants	Short-term	Medium-term	Long-term
Supplies: Office supplies (client files, folders, pens, paper, etc.), client support materials (program handouts, cards, photos), site outreach materials, copying/printing materials, postage, computer network, cellphone usage, medical supplies (blood pressure cuffs, stethoscopes, disposable measuring tapes, baby dolls), program supplies (portable baby scales, pediatric pad/board, age appropriate toys, disposable exam gloves, disinfectant surface wipes, luggage carriers, laptop/portable device)	3. Pregnancy Outcomes	3. Nurse Home Visitors, Mothers, and Children	3. Mothers are educated on preventive health and prenatal practices.	3. Mothers utilize nurses as social and emotional support and seek knowledge from nurses.	3. Mothers display improved health behaviors.
	4. Health and Development of Child	4. Nurse Home Visitors, Mothers, and Children	4. Mothers learn about health and development for her and the child.	4. Mothers receive continued coaching from nurses for increased awareness.	4. Parents demonstrate competent caregiving for their infants and toddlers and there is a decrease in adverse experiences.
	5. Families' Self-Sufficiency	5. Nurse Home Visitors, Mothers, and Children	5. Nurses facilitate decision-making for the future.	5. Mothers develop plans for economic self-sufficiency.	5. Mothers have increased self-sufficiency and increased confidence for their future.

ASSUMPTIONS	EXTERNAL FACTORS
1. Core education courses for NFP nurses will guide nurses' service delivery (Olds et al., 2013)	1. Nurse Family Partnership operates in the United States.

ASSUMPTIONS	EXTERNAL FACTORS
<ul style="list-style-type: none"> • Nurse education will promote flexible collaboration between nurses and families to meet families’ needs (Olds et al., 2013) • Educational background will give nurses knowledge and expertise in forming therapeutic relationships (Dmytryshyn et al., 2015) <p>2. Nurses will accomplish NFP goals: improving pregnancy outcomes, improving child and health development, improving families’ economic self-sufficiency through home visitations (Beam et al., 2010)</p> <ul style="list-style-type: none"> • Nurses receive a caseload of 25 families and adapt visit guidelines to individual needs of families (Beam et al., 2010) • Nurses will establish a therapeutic relationship with mothers by visiting weekly and will maintain the therapeutic relationship through ongoing visitations until the child’s second birthday (Beam et al., 2010) <p>3. Nurses engage mothers by discussing and providing knowledge on fetal growth, attachment, body and life changes, relationships, family and friends (Landy et al., 2012).</p> <ul style="list-style-type: none"> • Decrease in prenatal cigarette smoking, fewer hypertensive disorders of pregnancy, decrease in premature births, and fewer closely-spaced subsequent pregnancies (Nurse Family Partnership, 2022) 	<p>2. Nurse Family Partnership operates in 40 states, Washington D.C., the U.S. Virgin Islands, and some tribal communities.</p> <p>3. Nurse-Family Partnership predominantly serves low-income, first-time mothers</p> <p>4. African American, Latino, and White females comprise the majority of program participants.</p> <p>5. Median age of mothers served is 19 years old and unmarried.</p> <p>6. Nurse Family Partnership served 61,370 mothers in 2019.</p>

ASSUMPTIONS	EXTERNAL FACTORS
<p>4. Mothers exhibit less punishment and restriction of their infants (Olds, 2012)</p> <ul style="list-style-type: none"> • Increase in home environments that provide or enhance child’s emotional and cognitive development (Olds, 2012) • Reduction in child abuse and neglect, less behavioral and intellectual concerns by age 6, fewer emergency room visits (Nurse Family Partnership, 2022) <p>5. Increase in maternal employment (Landy et al., 2012)</p>	

EVALUATION PLAN:
<ul style="list-style-type: none"> • NFP requires replication of models tested in original randomized controlled trials in order to achieve impacts consistent with those found in previous trials. • Data from original trials, sites’ performance metrics, nurses, families, stakeholders, and program evaluations are reviewed by a standing committee composed of representatives of the National Service Office (NSO) and Prevention Research Center for Family and Child Health (PRC) (Olds et al., 2013). • The NSO and PRC evaluate data to make preliminary decisions about the best approach for improving outcomes while ensuring fidelity to the NFP model. • NFP and NSO generate regular reports for sites that compare implementation and maternal and child health outcomes with national averages and results from original trials (Olds et al., 2013). • Administrators, supervisors, and nurses use these reports generated by the NSO and results of program evaluations to reflect on their performance and make improvements to their practice (Olds et al., 2013).