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Laying the Foundation for New Approaches in Evidence-Based Sex Education Curriculum Programs: A Family Life Policy Change

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This is to certify that the doctoral study by

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Abstract

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MS, Belmont University, 2000

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Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

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Abstract

The teen pregnancy rate in Henry County, Tennessee has increased over the years. The purpose of this project was to develop an evidence-based family life education policy for adoption by the board of education to address the persistent high teen pregnancy rate for girls aged 15-17 in the county. The study resulted in a revised policy based on a comprehensive policy termed Abstinence-Centered Plus Contraception. An 18 member collaborative, organizational, and community project team, made up of community leaders, nurses, counselors, teachers, and students, assisted in the development and adoption of the policy, practice guidelines, and the development of implementation and evaluation plans for the newly adopted policy. The theoretical framework was based on the social, cognitive, and behavior change theories. The program logic model served as a framework to monitor project progress successfully. Existing peer-reviewed literature (research studies, state and national teen pregnancy prevention projects and curriculum, and publicly available statistics) were gathered and reviewed as background to be used for developing and changing policy at the institutional level. Project monitoring involved tracking processes surrounding policy and practice guideline development and adoption, as well as implementation and evaluation plan development for the adopted policy and whether these processes progressed as the research demonstrated that teen pregnancy prevention projects should when changing sex education policy at the organizational level. This project resulted in policy adoption and developing a policy implementation and evaluation plan to be disseminated within a county school system that could decrease teen pregnancy rates and demonstrate positive outcomes.

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Dedication

I would like to dedicate this project to my family: Steve, Colby, Shelby, Luke, and Abbey, you all are a true inspiration to me. Thanks for putting up with all the long hours I have spent through the course of our marriage and lifetime together working on advancing my degrees. Your support, love, and understanding has been monumental in this process. I love you all very much.

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Introduction

Teen pregnancy is a population health issue due to the negative social, economic, and health consequences that teen mothers experience. Even though teen pregnancy rates are at all-time lows, there are still over 300,000 babies born annually to teen moms in the United States, of which 82% are unintended (National Campaign to Prevent Teen Pregnancy, 2014). Locally, the teen pregnancy rates are increasing, which results in negative health outcomes. Henry County's current policy for family life education (FLE) stated, "Instruction of family life education shall emphasize that abstinence from sexual relations is the only method of protection that is 100% effective" (Henry County Board of Education, 2001, http://www.boardpolicy.net/documents/detail.asp?iFile=4770& iType=4&iBoard=45). This policy was dated, currently lacking specifics regarding sensitive and controversial topics of instruction, as well as not corresponding with the state board of education (BOE) FLE standards or the National Sexual Health Standards. This outdated policy left uncertainty among the coordinated school health (CSH) department, department of nursing, guidance counselors, school nurses, administrators, and educators within the county school system as to what can and cannot be taught regarding sexual health and may underscore the recent rise in the teen pregnancy rates.

Because the school systems have not adopted a comprehensive FLE policy that mirrors the school systems' evidence-based teen pregnancy prevention program, sexual health educators are unsure about program dissemination, which also led to the omission of controversial or sensitive program content. This, coupled with the rising teen

pregnancy rates, not only poses concern for the community's families, health care professionals, and stakeholders, but also places the Henry County School System (HCSS) at risk for national- and state-mandated processes with scrutinized evaluation processes when the teen pregnancy rates are above 19.5/1000 females ages 15-17 (National Association of State Boards of Education [NASBE], 2013). These state-mandated processes were developed to address the recent rise in teen pregnancy (NASBE, 2013)

Key organizational and community stakeholders assumed that the adoption of a comprehensive sex education policy would allow for the complete dissemination of the current teen pregnancy prevention program. The adoption of a comprehensive FLE policy should result decreasing teen pregnancy rates, increasing contraception and condom use for the sexually active, and delaying the onset of coitus for the nonsexually active. Therefore, this project was considered to be Stage I of the CSH Department Teen Pregnancy Prevention Action Plan (TPPAP) to combat the rising teen pregnancy rate experienced within the county. This plan focused on the revision and adoption of the current FLE policy to a more comprehensive- and evidence-based policy, termed Abstinence-Centered Plus Contraception, as well as developing practice guidelines and implementation and evaluation plans for the newly adopted policy by December 2014. This DNP project will be followed by a broader organizational and community initiative, which includes development of implementation and evaluation plans for the Michigan model for health (MMH) and the actual implementation and evaluation processes scheduled to commence in August 2015.

Adolescents and teens are considered to be in developmental periods of their life and are vulnerable to environmental influences. It is essential to facilitate the adoption of healthy behaviors that ensure a healthy, rewarding, and successful adult life. It is also necessary for all community and organizational stakeholders to understand that adolescent health behaviors are grounded in their social environments influenced not only by their peers, but also by their family, school, and community at individual and societal levels (Healthy People, 2013; Kirby, 2001, 2007, 2008; Kirby, Coyle, Alton, Rolleri, & Robin, 2011; Kirby & Lepore, 2007; Office of Adolescent Health [OAH], 2013). The short- and long-term negative social, environmental, and economic outcomes of the lack of use, dissemination, and evaluation of an evidence-based teen pregnancy program, such as the MMH, are immense (Centers for Disease Control [CDC], 2011a, 2011b, 2013; Hoffman, 2008; Kirby, 2008; Kirby, Laris, & Rolleri, 2007; OAH, 2013; Perper, Peterson, & Manlove, 2010; Sing & Darroch, 2000). For the future success of Henry County's youth, it is necessary to change the direction of the sexual health education currently being taught within the HCSS and fully disseminate, as well as evaluate, program outcomes and the impact the MMH will have on the counties youth for years to come.

Problem Statement

The teen pregnancy rate for females aged 15-17 in Henry County, Tennessee has risen from 14.5/1000 in 2010 to 25.9/1000 in 2011 and 32.0/1000 for 2012 (Tennessee Department of Health, n.d). This placed Henry County 10th out of 95 counties of the highest rated teen pregnancy counties, despite the adoption of an evidence-based teen

prevention program, the MMH, several years ago (Tennessee Department of Health, n.d.). The problem addressed within this project was the persistent high teen pregnancy rate, for teen girls ages 15-17, in the Henry County, Tennessee area.

Purpose Statement

The purpose of this project was to develop an evidence-based FLE policy for possible adoption by the BOE. This revised policy was based on a comprehensive policy termed Abstinence-Centered Plus Contraception. A collaborative, organizational, and community project team was developed to assist with the adoption of the policy, practice guidelines, as wells as the development of implementation and evaluation plans for the newly adopted policy.

Project Goals and Outcomes

The national health promotion and disease prevention issue selected for this project was the increased rate of teen pregnancy for ages teen girls 15-17 experienced within the HCSS. Henry County had experienced yet another rise in the teen pregnancy rates to 32.0/1,000 (Tennessee Department of Health, n.d). From 2011, the teen pregnancy rate of 25.9/1,000 females, ages 15-17 rose, from 14.5/1,000 females for the same age group for 2010 (Tennessee Department of Health, n.d.). The 2012 data placed Henry County 10th out of 95 counties in the state with the highest teen pregnancy rates, surpassing the larger metropolitan areas in the state (Tennessee Department of Health, n.d). These rates increased despite the implementation of an evidence-based teen pregnancy prevention model, MMH, being used correctly within the school system. Key

stakeholders felt that the rates will increase even more to the number of teen pregnancies experienced within the HCSS over the past couple of years.

The long-term overall project goal for the larger organizational and community initiative was to decrease the teen pregnancy rates teen girls aged 15-17 by 2017 in Henry County, Tennessee. Therefore, this project also included two additional goals: to increase contraceptive use among sexually active adolescents and to delay the onset of sex for the nonsexually active youth of Henry County.

Project Objectives

In this project, I focused on the revision of a family life policy to a more comprehensive evidence-based policy that supports the comprehensive teen pregnancy prevention program, the MMH. In order to do this the following project objectives were necessary:

1. Assemble a community and organizational stakeholder project team
2. Guide a project team in a review of literature and other available evidence
3. Develop new comprehensive FLE policy and practice guidelines
4. Validate policy and practice guidelines from experts in the field
5. Obtain board approval of new FLE policy and practice guidelines
6. Develop implementation plan for the newly adopted policy
7. Develop evaluation plan for the newly adopted policy

Project Frameworks

The project's theoretical framework was based on the social, cognitive, and behavior change theories that have been grounded in the educational learning and health

care systems for decades. The social learning theories are effective in influencing risky behaviors and focus on social influences, changing personal values and group norms, and building social skills (Hoyt & Broom, 2006). Researchers have demonstrated that programs grounded in psychological, social, behavior, and cognitive learning theories can be used to identify the risk and protective factors that affect behavior (Kirby et al., 2011). Moreover, when the cognitive risk and protective factors are identified, activities and programs that are constructed to change those factors decrease the risky sexual behavior of adolescents and teens, resulting in a decrease in the negative physical, social, and environmental consequences of teen pregnancy (Bandura, 1977; Hacker, Brown, Cabral, & Dodds, 2005; Hoyt & Broom, 2006; Kirby, 2001, 2007; 2008; Kirby et al., 2011; McEwen & Wills, 2011).

Additionally, the program logic model was used as a guiding framework and evaluation tool for the theoretical underpinning and guiding program processes. The logic model is used to delineate characteristics, theoretical constructs, and concepts of the theory and to describe principles and processes that lead to expected behavior changes. The logic model was also used for guiding program processes because it assists in the mapping out of resources, objectives, and activities that are needed to reach the short- and long-term goals, desired outcomes, and health determinants during the planning process of the project. The logic model allowed for an evaluation to occur throughout every phase of the project. It allowed for the project team to assess, evaluate, and expand upon the project as needed in order to make the necessary changes in project activities and note whether the completed activities obtained the goal. The logic model was used to

determine whether changes were needed to meet the outcomes or if the outcomes were met (Colorado Department of Public Health, 2012; Delaware Health and Social Services Division of Public Health, 2011; Hallinan, 2010; Huton, 2007; Oregon Department of Human Services Children, Adult, and Families Division, 2009; W.K. Kellog, 2006; W. K. Kellog Foundation, 2010).

Looking ahead at the larger organizational and community initiative, the project team should continue to use the logic model throughout project implementation and evaluation planning as well as during actual implementation and evaluation of the MMH. This will allow for continuous remodeling and monitoring of the program and assist in demonstrating that the resources, inputs and throughputs, program development, and sustainment that led to the desired outcomes as well as validate support for continuous program funding.

Nature of the Project

In this project, I focused on the revision and adoption of the FLE policy and practice guidelines that addressed how sex education was taught within the HCSS. The approach included the development of a collaborative, organizational, and community project team that assisted in the revision, development, and adoption of a comprehensive policy, practice guidelines, and a plan for implementing and evaluating the newly adopted policy. The project team will also be used and built upon for the larger organizational and community initiative of developing an implementation and evaluation plan for the MMH and for full dissemination and evaluation of the MMH throughout Grades K-12 within the HCSS.

The rationale for this approach has been demonstrated within several state initiatives, CDC research projects, and other reputable scientific studies that have shown positive outcomes in the prevention of teen pregnancy, contraceptive use, and delaying the onset of sex (Colorado Department of Public Health, 2012; Community Preventive Task Force, 2012, 2013; Delaware Health and Social Services Division of Public Health, 2011; Gavin et al., 2010; Hoyt & Broom, 2002; Kettner, Moroney, & Martin, 2013; Kirby, 2001, 2007, Kirby et al., 2011; Kirby et al., 2007; Koh, 2014; Oregon Department of Human Services Children Adult, and Families Division, 2009; Shrier, 2001). If other successful teen pregnancy prevention projects are mirrored across the country, then Henry County may also have the same success in decreasing the teen pregnancy rate, delaying the onset of sex for the nonsexually active, and increasing the contraceptive and condom use among the sexually active.

The only type of data collection contained within this project was in the form of existing peer-reviewed literature, including research studies as well as publically available statistics. Gathering upfront data assisted in identifying unmet needs and gaps seen in services in order to plan ahead for more effective policy revision, practice guideline development, and policy implementation and evaluation plan development. The evidence collected included other peer-reviewed county and state FLE policies, evidence-based teen pregnancy prevention programs, project team development, and the implementation and evaluation processes of program development and dissemination. Other forms of evidence needed were information pertaining to the Tennessee State laws regarding FLE, current and ideal dissemination processes for the MMH; state statistics;

and community, organizational, and state resources (Chin et al., 2012; Community Preventive Services Task Force, 2012, 2013; Constaine, 2008; Coyle et al., 2006; Gavin et al., 2010; Hodges & Videto, 2011; Kirby, 2001, 2007; Kirby et al., 2011; Kirby et al., 2007; Kohler et al., 2008; Santelli et al., 2006).

Definition of Terms

For the purpose of this study, the following words or phrases are defined:

*Age-appropriate***:** Educational methods, topics, and messages suitable for a particular age groups, which are based on behavioral, cognitive, and emotional capacity (Colorado Department of Public Health, 2012; Oregon Department of Human Services Children, Adult, and Families Division, 2009).

Abstinence-centered: Abstinence-centered education is a holistic approach that addresses the physical, social, emotional, psychological, economic, and educational consequences of nonmarital sexual activity. Abstinence-centered education teaches abstinence-only material in addition to pregnancy and sexually transmitted diseases (STDs), but does not elaborate on contraception as a prevention of pregnancy, STDs, and HIV/AIDs (Oregon Department of Human Services Children, Adult, and Families Division, 2009).

Abstinence-only: Not participating in any activity that puts an individual at risk for pregnancy and/or an STD. Abstinence-only education teaches avoidance of pregnancy, STDs, or HIV/AIDS by the way of abstinence (Oregon Department of Human Services Children, Adult, and Families Division, 2009).

Behavior change theory: A structured set of understandings describing, predicting, and explaining why people act as they do and how to change what they do. These understandings underlie interventions that work toward changing health behaviors (Kirby et al., 2011).

Cognitive: Knowledge gained through perception, reasoning, or intuition (Kirby et al., 2011).

Comprehensive sexuality education: Age-appropriate educational programs that are medically accurate, teach about abstinence as the best method for avoiding STDs and unintended pregnancy, but also include information pertaining to condoms and contraception to reduce the risk of unintended pregnancy and STDs, including HIV. It also incorporates interpersonal and communication skills and helps young people explore their own values, goals, and options; family communication; skill and self-efficacy development in teaching youth to avoid unwanted verbal, physical, and sexual advances; responsible relationship development; preventing dating and sexual violence; and teaching about how alcohol and drug use can affect responsible decision making (Colorado Department of Public Health, 2012; Oregon Department of Human Services Children, Adult, and Families Division, 2009).

Contraception: The intentional prevention of pregnancy through the use of various devices, agents, drugs, sexual practices, or surgical procedures (Colorado Department of Public Health, 2012; Kirby et al., 2011)

Evidence-based programs: A scientifically evaluated program that uses rigorous research design. It includes an adequate sample size, replication in different locations,

and sound research methods to measure knowledge, attitude, and behavior and is published in a peer-reviewed journal. It has shown to be effective in changing at least one of the risky behaviors that contributes to early pregnancy, STD, and HIV infection (Colorado Department of Public Health, 2012; Oregon Department of Human Services Children, Adult, and Families Division, 2009).

Pregnancy rate: The number of pregnancies (including births, reported abortions, and fetal losses) per 1,000 women in a specified age or race and origin group (Department of Health, n.d.). For this project, the pregnancy rate included all races, and the specific age group was delineated.

Social cognitive theory: A structured set of ideas that stress the dynamic interrelationships among people, their behavior, and their environment (Kirby et al., 2011).

Teen pregnancy: A pregnancy experienced in a girl between the ages of 13-19 (Unicef, 2008). This project focused on the ages 15-17 because that is where the increase in teen pregnancy was experienced within the school system.

Assumptions

This project had several assumptions pertaining to the rise in teen pregnancy rates. It was assumed that the lack of educational instruction of sexual health and full dissemination of the MMH partially resulted in the rise in the teen pregnancy rates for girls aged 15-17 in the county for 2011 and 2012. In the MMH topic template for Grades K-12, distributed to family life and wellness educators, the majority of the sensitive topics were omitted. Additionally, the class syllabuses for wellness classes in Grades 6-

12 and informal discussion at the meetings, which had several ninth through12th grade members, emulated the same findings. The reasoning for the lack of MMH dissemination was thought to be due to the state law placing fines of up to $500 per student on outside educators, which caused misperceptions by the county's educators as to what could and could not be taught regarding FLE.

The rise in teen pregnancy could also be attributed to the county's health educator employed through the state's health department being restricted from assisting with FLE within the county's schools. This restriction was thought to be the result of an undisclosed lawsuit filed against the state and educational facility for alleged inappropriate content of sexual health information. At the initiation of this lawsuit, the state department of health decided that county health educators were not allowed to assist the educational systems with topics pertaining to sexual health. This was recently resolved when the state attorney general released an addendum stating that county health educators could not be fined as other outside agencies who cover FLE material not in accordance with the provision of "*What Cannot be Taught*" for FLE (NASBE, 2013; State of Tennessee, 2013).

The lack of full dissemination of the MMH was assumed to have stemmed from several other possibilities. First, teachers may have felt as if the MMH content did not provide the sexuality education they thought should be taught, even though this had not been expressed. Secondly, there could be shortcomings in the teachers' training that prevented them from covering certain topics as well as practical challenges such as time, funding, restrictive policies, or a lack of administrative support (Eisenberg, Madsen,

Oliphant, & Sieving, 2013). This assumption was expected to be eliminated with continued professional training and revision of the family life policy that would allow for teachers to feel confident and competent in their training, as well as policy guidelines consistent with an educational policy that parallels comprehensive sex education and state and national educational sexual health standards.

The organization also assumed that the MMH is culturally and ethnically sensitive. The specific needs of adolescent subgroups and younger and older adolescents must also be addressed. The MMH is the sexual health model of adoption for the state's health department (Department of Education, n.d.). To date, there have been no system-wide research studies, within the state nor nationally, that addressed the effectiveness of the MMH within subpopulations or ethnically diverse populations in educational systems. Therefore, it was assumed that this sexual health teen pregnancy prevention model for health would meet the needs of all adolescent subgroups, and culturally and ethnically diverse students, until proven otherwise.

Delimitations

This project was intended to address the rising teen pregnancy rates in Henry County, Tennessee. Changing the FLE policy from one that is abstinence-only to one that allows for instruction of STDs, contraceptive and condom use, termed Abstinence-Centered Plus Contraceptives, as well as developing an implementation and evaluation plans for the policy and practice guidelines was believed to guide the project teams in the future development of an implementation and evaluation plan for the evidence-based, comprehensive teen pregnancy prevention program, the MMH. The MMH was adopted

for the HCSS several years ago by the BOE to address the increasing rates of teen pregnancy. At the local schools, there was a lack of a supporting policy, implementation, and evaluation plan of the MMH. In addition, educators misunderstood the law of placing fines upon outside agencies who come into the school systems and teach FLE, which led to the county's health educator, as well as the school systems educators, to steer away from the controversial material surrounding FLE instruction. This prohibited the MMH program from being disseminated properly, which was believed to result in the rise in the teen pregnancy rates for the county.

The rising teen pregnancy rates concerned key organizational stakeholders due to the Tennessee state law mandating each district to devise, adopt, and implement a program of FLE in conformance with the curriculum guidelines established for such programs when the teen pregnancy rates are above 19.5/1,000 for ages 15-17. If the district failed to adopt a FLE that complied with the law, the state commissioner could withhold funds intended for that educational institution, and the state BOE could adopt a curriculum for the district. Therefore, a delimitation of this project was to target specific adolescent and teen population, as well as all students in Grades K-12, within the county's school system. This is the population that comprehensive, evidence-based FLE policy and teen pregnancy prevention programs target in order to reduce the teen pregnancy rates for which the law is directed. Teen pregnancy prevention programs are intended to start at an early age and continue through graduation from the institution. This proved beneficial because rather than trying to take the practice problem out of context it allowed for an emphasis to be placed upon the particular context or population

it was intended for. This also allowed for the ability to build products such as policy, practice guidelines, implementation, and evaluation plans that work for the population.

The project boundaries for this project were that the policy, practice guidelines, implementation, and evaluation plans were intended to be developed and used for all ages and all grades, K-12, also termed the target population, within the HCSS. The potential transferability of the project was that the processes could be mirrored within other peer county school systems and other CSH departments within Tennessee. The project approach could also be used by school nurses, educators, administrators, and other CSH departments in identifying the necessary processes and activities that would positively change sexual health education in schools. Additionally, the project could assist other peer counties in identifying the necessary processes needed for changing policy at the educational level. Other peer counties could mirror this project's approach in addressing other health issues within the educational setting pertaining to the policy implementation and evaluation plan development that emulates evidence-based programs. Finally, this project assisted in the collaborative workings and knowledge that take place within communities and organizations and contributed in clarifying processes pertaining to the education of sexual health, educational institutional policy change, implementation, and evaluation plan development for policy and practice guidelines for the processes of changing policy, planning, implementing, and evaluating program processes, outcomes, and health determinants.

Limitations

Several limitations existed within this project. First, this project centered on a family life policy change to achieve full dissemination and implementation of the MMH. Therefore, randomized controlled or experimentally designed scientific research was not conducted to link specific outcomes to program content. The findings of this project are not generalizable and are only representative of the small rural West Tennessee community in which the project was conducted. Consequently, it cannot be assumed that what works for this program will work for other programs. A comprehensive program with many components make it difficult to determine or differentiate effective from ineffective components or to control the level of intensity required of the participating students or the instructor. There is a need for experimentally designed comparison studies in the future within this population that are scientifically controlled once the MMH has been fully implemented.

Decreasing the teen pregnancy rate is a long-term project outcome and health behavior determinant for program effectiveness. Any particular year's outcome will not be acknowledged due to the 2-year delay of state statistical teen pregnancy data. This delay will make it difficult to determine if the full implementation efforts of the MMH resulted in decreased teen pregnancy rates for any given year. Furthermore, a cause and effect relationship between outcome and program dissemination efforts is almost impossible to determine due to the many facets of program dissemination. Therefore, long-term and continuous follow up is advised during and after program stages and implementation using pre/posttest administered over specific topics at specified time

intervals to scientifically measure program impact on the population, program outcome, and health impact of a intervention upon knowledge, behavior, and skills.

Looking ahead postimplementation, there may be difficulty in assessing how much time is devoted to specific topics and pedagogical techniques used or content addressed in individual classes. Therefore, consistently using MMH modules' specified content and assuring that all topics are instructed as designed will be difficult to control. Therefore, each educator should be consistently trained and encouraged to disseminate as the MMH recommends. Even then, challenges exist to ensure that all topics are covered per model scripts and recommendations in order to measure cause and affect relationships. This limitation would need to be addressed during the development phases and instructor training to assure consistency, fidelity, and reliability.

There were many unanswered questions beyond these limitations that could be identified, but pregnancy prevention efforts need to extend beyond policy change and individual decisions about contraception and sexuality. The influence of family, community, and environment also must be recognized and their impact on reproductive behavior. Future projects need to revolve around engagement of all partners, including health, education, social services, youth support services, and the voluntary sector. These projects need to include the provision of health services tailored for youth not only within the institution, but also community-wide, with demonstrated program effectiveness and replication studies examining results among diverse samples.

Relevance to Nursing Practice

Teen pregnancy is a population health issue. The adoption of healthy behaviors is essential to adolescents and young adults because they are in developmental periods of their lives and are susceptible to environmental influences. Furthermore, adolescent health behaviors are established early on and are grounded in their social surroundings; this needs to be understood by all community and organizational stakeholders (Kirby et al., 2011; Kirby & Lepore, 2007). In this project, I identified activities and facilitating factors imperative to the workings of educational sexual health policy change, as well as demonstrated barriers that could impede policy development and adoption. The findings of this project improved efforts toward decreasing adolescent and teen pregnancy within the educational and community setting.

Doctorates of nursing practice are prepared to assist communities and educational institutions in the development and implementation of teen pregnancy prevention programs that assist in identifying factors and programs that impact behavior. Advanced practice nurses APN) understand the need for continuous review of the literature in search of best practices, and school nurses are key in understanding and developing the most effective teen pregnancy prevention strategies demonstrated and then translating that information into educational, community, and health care practices and policies. Nurses are on the front line in their efforts to promote safe sexual practices and can join forces with parents, community organizations, and schools to focus on adolescent and teen lifetime success academically, socially, emotionally, and financially through

lobbying efforts to change local, state, and national policies that affect the current and future sexual health of the nation's youth.

Nurses should be more persuasive to community and school leaders who prefer abstinence-only education, be bolder in initiating conversations about consequences of pregnancy and the need for safe sex practices, and lobby for educational institutions to lead their educational facilities with evidence-based practice programs that have demonstrated effectiveness. Additionally, nurses in educational institutions should mirror this project's approach in addressing other health issues within educational institutions needing to be addressed, such as obesity, violence, bullying, or drug us, because those also result from negative health behaviors. This project added to the existing body of the collaborative workings and knowledge that take place within communities and organizations and assist in clarifying processes pertaining to the education of sexual health; educational institutional policy change; implementation and evaluation plan development for the processes of changing policy; and planning, implementing, and evaluating policy processes and outcomes, as well as the workings necessary in order to achieve specific health determinants.

Evidence-Based Significance of the Project

Even though teen pregnancy rates are reaching all-time lows in the United States, there are still over 300,000 teen pregnancies occurring annually in the United States, of which 82% are unintended (Guttmacher Institute, 2012). The United States still has the highest teen birth rate in the developed world (Baird & Porter, 2011). Nearly half (47.4%) of high school students' nationally initiate sexual activity by the 12th grade

(CDC, 2011c). According to the Youth Risk Behavior Surveillance (YRBS), 33.7% of students surveyed reported having had sexual intercourse with at least one person during the 3 months prior to the survey (CDC, 2011c).

For the last 4 years, Henry County's teen birth rate has exceeded the state rate as well as national benchmarks (Robert Johnson Woods Foundation, 2013). In 2009, Henry County's pregnancy rate was 31.8/1,000 for ages 10-19 and 19.5 for all races ages 15-19; Henry County ranked 17 out 95 counties with the highest adolescent pregnancy rates for ages 10-19, which resulted in the approval and adoption of the MMH for the HCSS (Department of Health Policy, Planning and Assessment Division of Health Statistics, 2012; Tennessee Department of Health, n.d.). That same year, the community health status indicators placed the county in unfavorable status when compared to peer counties and to U.S. rates for low birth weight, births to women under 18, and infant mortality (U.S. Department of Health and Human Services, n.d.). The 2011 teen pregnancy data placed Henry County at 25.9/1,000, which was a significant rise from the 2010 rate of 14.5/1,000 (Tennessee Department of Health, n.d.). Additionally, the county experienced yet another increase for 2012 with the teen pregnancy rates soaring to 32.0/1,000 for races ages 15-17 (Tennessee Department of Health, n.d.).

Researchers have found adolescent and teen sexual activity to be associated with emotional and social environmental factors and physical health risks and significant social and economic costs, not only for the mother but also for the child and teen fathers (CDC, 2007; Dunne et al., 2007; Gottlieb et al., 2008). Society incurs significant annual cost due to teen pregnancy and childbirth, and taxpayers are estimated to pay over 11

billion dollars a year due to the negative consequences of teen pregnancy (Hoffman, 2006; Hoffman & Maynard, 2008; United States Department of Commerce, 2014). Until the last half decade, the government primarily funded initiatives and programs that promote abstinence-only messages for their sexual health education despite controversy over their appropriateness and scientific efficacy (Jemmott, Jemmott, & Fong, 2010; Kohler et al., 2008; Marques & Ressa, 2013; Wiley, 2012). The United States did not support funding for comprehensive evidence-based programs that used curriculum-based sex education or youth development approaches to prevent pregnancy until 2010 (Chin et al., 2012; Wiley, 2012).

Schools, communities, and organizations have been developing Abstinence- Only programs to reduce the negative sexual behaviors of youth in order to decrease pregnancy or the other undesirable effects of unprotected sex with little evidence. Elements of exemplary programs entail abstinence education, behavioral skill development, community outreach, contraceptive access, contraceptive education, life option enhancement, self-efficacy/self-esteem education, and sexuality and provide information regarding sexually transmitted infections (STI) and HIV/AIDs education (Chin et al 2012; Hoyt & Broom, 2002). Researchers have also shown that effective programs have several common key attributes that guide the development of age-appropriate curricula and integration of program activities for pregnancy, HIV/AIDs, and STI prevention not only in schools but also in communities (Agency for Health Research and Quality [AHRQ], 2010; CDC, 2013; Chin et al., 2012; Community Preventive Services Task

Force, 2012, 2013; Kirby, 2001, 2007, 2008; Kirby et al., 2011; Kirby et al., 2007; Kirby & Lepore, 2007).

Successful teen pregnancy prevention programs that incorporate certain characteristics to assist in behavior modification lead to improving the risk and protective factors that impact decision making regarding sexual behavior. Scholars have claimed that the use of condoms, and other forms of contraception, do not increase sexual behavior, but actually delay the onset of sexual intercourse; reducing the number of sexual partners; and sexual risks behaviors, repeat teen pregnancies, and unprotected sexual participation, as well as increases condom and contraceptive use (Chin et al., 2012; Community Preventive Services Task Force; 2012, 2013; Coyle et al., 2006; DiClemente et al., 2004; DiClemente et al., 2009; Jemmott, Jemmott, Braverman, & Fong, 2005; Jemmott et al., 2010; Kirby, 2007, 2008; Kirby et al., 2011; Kohler et al., 2008; Lindberg & Zimet, 2012; Shrier et al., 2001; Tortolero et al, 2010; Trenholm et al., 2007).

There is a need for school program and policy alignment with state and national sexuality education standards. National, state, and organizational standard consistency assists in strengthening collaborative relationships amongst schools, youth, parents, faith communities, service providers, and local decision makers. Corresponding community resources, while ensuring that the state law and standards are implemented using evidence-based programs within the individual districts, are key to address youth sexual health issues (Barbot, 2012; Colorado Department of Public Health, 2012; Constatine, 2008; Moore, Barr, & Johnson, 2013; Santelli et al., 2006; Wiley, 2012).

For years, key decision makers have developed sex education policies and practices comprising of a mixture of science, morality, politics, and personal opinions with science fairing grimly when practice, policies, and curriculum decisions were made in state and local legislatures and local school board meetings. This compromises the sex education of the nation's youth (Constatine, 2008; Wiley, 2012). The majority of sex education policies result in the youth receiving information that is disjointed, inadequate, incorrect, and grounded on curricula that is ineffective "due to the morally motivated debates of the appropriateness of comprehensive sex education versus abstinence-only education" (Constatine, 2008, p. 324). This should raise ethical concerns as a denial of a basic human right (Constatine, 2008; Eisenberg et al., 2013; Santilli et al., 2006; Wiley, 2012).

Teachers and educators have expressed that controversial subjects should be taught even if they do not actually teach them and that district policy; a lack of time; financial resources; and curriculum, parental, or administrative concerns were the most common barriers impacting their choices as to what they taught their students (Mpanza, & Nzima, 2010). Teens have expressed a need for more sexual information in schools that is directed and developed with them in mind. This message from the user voice should sway community and organizational stakeholders to change the direction of dated educational policies and abstinence-only programs (Meaney, Rye, Wood, & Solovieva, 2009; Weiss, 2012). Furthermore, the parental and public support for comprehensive evidence-based sex education in schools, coupled with the demonstrated effectiveness of evidence-based comprehensive sex education programs, suggest that policy needs to

catch up with the evidence (Chin et al., 2012; Community Preventive Services Task Force, 2012; Coyle et al., 2006; DiClemente et al., 2004; DiClemente et al., 2009; Eisenberg, Bernat, Bearinger, & Resnic, 2008; Jemmott et al., 2005, 2010; Kirby, 2007, 2008; Kirby et al., 2011; Kohler et al., 2008; Lindberg & Zimet, 2012; Shrier et al., 2001; Tortolero et al, 2010; Trenholm et al., 2007).

Parents and youth are key in repairing the dysfunctional policies across this nation to armor children with the best possible sex education available. They are critical stakeholders in the health and educational policy affecting adolescents and teens and influencing school officials and BOEs for banning political mandates based on religious backgrounds, political orientation, or the vocal minority so often experience (Eisenberg et al., 2008). There is a need for interdisciplinary sexuality curricula development encompassing broader sex education topics that allows teachers in multiple subject areas to incorporate sexuality education into their lesson plans, integrating rigorous evaluation processes. It is essential for policies to reflect a young person's basic right to receive accurate health information and learn in an environment where sexuality is understood to be a normal part of adolescent development (Eisenberg et al., 2013).

When regulating the allocation of resources and the formation and adoption of equitable and evidence-based policies that reflect the health care and educational needs of youth, it is imperative that the youth and families of communities have access to resources and opportunities that assures access to accurate and age-appropriate health information, so that the youth of this nation grow up to become healthy, successful, and responsible adults. National, state, and local policies need to reflect youth as consumers

of their own health care and respect their need for youth friendly services, not deny them a basic human right and the right to accurate and complete health information within the educational and community setting.

Implications for Social Change in Practice

There are many positive individual and social impacts of solving or decreasing risky sexual behavior in adolescents and teens. Curriculum-based sex, HIV/AIDS, STIs, and teen pregnancy prevention programs are unable to control whether the youth of Henry County engage in sexual activity or whether they use protection reliably and consistently. Teens and adolescents make their own decisions, but teens who participate in evidenced-based programs, with demonstrated effectiveness, show improvement in their the risk and protective factors impacting decision making regarding sexual behavior (Kirby, 2001, 2007, 2008; Kirby et al., 2007; Kirby et al., 2011; Kirby & Lepore, 2007). It is imperative that the factors affecting behavior be recognized so that effective and successful programs are designed and implemented (Kirby et al., 2011). If the implemented programs address the factors that influence teen and adolescent behaviors, and if programs are able to alter those factors, then the program will change and impact teen behavior. Comprehensive, curriculum-based sex education programs have an effect on behavior, internal, and cognitive factors of knowledge; attitudes; skills; and intentions; and the external factors of access to adolescent and teen reproductive health services (Kirby, 2001, 2007, 2008; Kirby et al., 2007; Kirby et al., 2011; Kirby & Lepore, 2007).

The developed and implemented evidence-based policy and programs should be used to shape adolescent attitudes regarding abstinence, frequency of sexual activity,

premarital sex, number of sexual partners, age of first sexual intercourse, increased safe-sex practices, and sexual health knowledge pertaining to sexual physiology, psychological impact, contraceptive methods, STIs, and HIV transmission and prevention. Demonstrated behaviors that have led to decreased teen pregnancy rates are improved self-efficacy to refuse sexual activity, decreased number of sexual partners, and increased communication with parents about sex, condoms, and contraceptive use among the sexually active. Additionally, attitudes toward risky sexual behavior, use of protection, intent to obtain and use condoms, and to abstain or restrict from sexual activity can led to better sexual behavior choices (Dunne et al., 2007; Finer & Henshaw, 2006; Gottlieb et al., 2008; Healthy People 2020, 2013; Jemmott et al., 2010; Kaplan, Hones, Olson, & Butler, 2013; Kirby, 2001, 2007, 2008; Kirby et al., 2011; McNeely & Blanchard, 2009; Moore et al., 2012; Wang, Meier, Shah, & Li, 2006).

Decreasing the negative behaviors of youth results in decreased teen pregnancy rates and unintended teen pregnancies. This, in turn, positively affects the social and economic cost to society. Health care and prenatal providers should see fewer birth defects, low birth weight infants, and behavior issues than currently experienced. Educators and school administrators should experience higher educational attainment and cognitive ability; decreased high school dropout rates, resulting in increased graduation rates; and more youth attending college or receiving technical training resulting in a more successful and rewarding adult life. U.S. taxpayers should experience less cost associated with increased health care and foster care, decreased incarceration rates of youth, more intact families, fewer families living in poverty, higher tax revenue and

income of young adults, lower unemployment rates, less poverty, and less single parent homes (AHRQ, 2010; CDC, 2014a; Hoffman & Maynard, 2008; National Campaign to Prevent Teen and Unplanned Pregnancy, 2011; Singh & Darroch, 2000).

Community-based comprehensive sexual health education programs shape future knowledge and attitudes regarding sexual behaviors and result in more conservative behavior and less favorable ideals regarding premarital sex (Dunne et al., 2007; Finer & Henshaw, 2006; Gottlieb et al., 2008; Healthy People 2020, 2013; Jemmott et al., 2010; Kaplan et al., 2013; Kirby, 2001, 2007, 2008; Kirby et al., 2011; McNeely & Blanchard, 2009; Moore et al., 2012; Wang et al., 2006). Governing officials should consider adoption of such programs within their organizations and communities because these programs permit cultural diffusion resulting in a leveling effect to liberalize sexual attitudes amount youth (Wang et al., 2006). Integrating the research with population and community needs is key to guiding nursing and educational practice as well as national, state, and local policies affecting adolescents (Fawcett & Garity, 2009).

Summary

The provision of sexual health education programs for adolescents has been controversial for decades. Teen pregnancy is a life changing event, not only to teen moms but the children of teen moms and teen fathers as well, due to the detrimental psychosocial, physical, educational, and economic consequences experienced by individuals, families, and communities. The societal cost is immense and potentially damaging to this nation's economic stability. It is imperative for developing teens to be grounded in their social environments and to acquire healthy behaviors that ensure

healthy, beneficial, and rewarding lives that result in being successful and responsible adults. Fundamental for all organizational and community stakeholders is the need to understand that adolescents are influenced by their families, school, and community at individual and societal levels. Educational institutions should lead by example and adopt sexual health policies that mirror effective evidence-based comprehensive teen pregnancy prevention programs as well as state and national sexual health educational standards.

Locally, the teen pregnancy rates are increasing as well as other negative health behaviors resulting in negative population health outcomes. The former FLE policy adopted for HCSS was vague, dated, and lacked the comprehensive sex educational components that identify impacting factors of adolescent behavior in order to change those factors that will positively impact their behavior. Researchers have demonstrated the need for comprehensive sexual health programs to be implemented into educational facilities and communities. Even though the HCSS teen pregnancy prevention program was comprehensive, many key components were being omitted. This was believed to be due to several factors, one being the lack of a cohesive policy that consistently supports controversial and sensitive program components and another being the lack of proper implementation and evaluation processes.

Nationally and locally there is parental, teen, and public support for comprehensive, evidence-based sex education in schools and demonstrated effectiveness of evidence-based, comprehensive sex education programs. It was imperative that the local FLE educational policy parallel what the evidence speaks of as effective sex education programs, that not only reduced the incidence of teen pregnancy, but also

decrease the number of HIV/AIDS/STIs, delay the onset of sex for nonsexually active, and increase the contraceptive use among sexually active youth. Therefore, I sought to change the current FLE policy to one that reflected an Abstinence-Centered Plus Contraception, develop practice guidelines, and a plan to fully implement and evaluate the newly adopted policy. This should lay the groundwork for the larger community and organization initiatives of implementing the MMH within all Grades K-12, as well as developing evaluation methods to monitor and measure program efforts, effectiveness, outcomes, and impact.

Section 2: Review of Literature and Theoretical and Conceptual Framework

Introduction

The teen pregnancy rate for females ages 15-17 in Henry County, Tennessee, have risen to 25.9/1,000 in 2011 and 32.0/1,000 for 2012 from 14.5/1,000 in 2010 despite the adoption of an evidence-based teen prevention program, the MMH, several years ago (Tennessee Department of Health, n.d.). The problem addressed in the project was the persistent high teen pregnancy rate, for ages 15-17, in the Henry County, Tennessee, area. The purpose of this project was to develop an evidence-based FLE policy and practice guidelines for adoption by the BOE. This revised policy was based on a comprehensive policy termed Abstinence-Centered Plus Contraception. A collaborative, organizational, and community project team assisted in the adoption, practice guidelines, and development of a policy implementation and evaluation plan. This project may lay the foundation for the larger community and organizational initiative and guide the plans for full implementation and evaluation of the MMH for inclusion into the educational curriculum, which is scheduled to start sometime in January of 2015.

Due to the many facets of this project, and the vast amount of literature available pertaining to teen pregnancy, there was a need to simplify and alleviate confusion. The evidence-based literature pertaining to teen pregnancy and the physical, social, and economic consequences of sex education in schools, effective teen pregnancy prevention programs, and parental and teen perspectives regarding sex education in schools will be reviewed in their respective headings.

Literature Search Strategy

The library used was Walden University. The search engines used to review the literature were Pro Quest, CINAHL, Science Direct, and Pub Med, all with full text database. Key search terms used in the review of the literature included *teen pregnancy*, *teen pregnancy prevention programs*, *abstinence-only programs*, *abstinence-centered programs*, *comprehensive teen pregnancy prevention programs*, *effective programs for teen pregnancy prevention*, *state laws and sex education*, *family life education in schools systems*, *national laws and sex education*, *sex education in primary and secondary education*, *contraceptives and sex education in school systems*, *parental support and sex education*, *teens and sex education*, *adolescents and sex education*, *state teen pregnancy prevention programs*, and *teen pregnancy prevention initiatives*.

Years searched were from 2000 to present except for the social learning and cognitive behavior theories, which was searched back to 1977. Other key websites with databases searched were the Office of Adolescent Health, CDC, National Campaign to Prevent Teen Pregnancy, Community Preventive Task Force, Comprehensive School Health-Coordinators Association, Colorado Coalition Against Sexual Assault, Delaware Health and Social Services, Oregon.gov, Tennessee Department of Education, Tennessee.gov, National Institute of Medicine, National Institute of Health, National Center for Biotechnology Information, Guttmacher Institute, Kellogg Foundation, Healthy People 2020, and the United States Department of Health and Human Services. Additionally, the CSH Department subscribed to the J*ournal of School Health and Journal of Adolescent Health* since 2004. These journals were searched personally in

addition to an online search of the *Journal of Adolescent Health*, which was also readily available due to the CSH subscription to this journal.

Teen Pregnancy

Over the past few years, Tennessee has experienced significant decreases in the teen pregnancy rate. Even though a 35% reduction was experienced in teen pregnancy from 2001 to 2010 for 10-to17-year-olds, the state has persistently ranked in the top 10 states with the highest teen pregnancy rates within the United States for over a decade (U.S. Department of Health and Human Services, 2013). In 2009, the state teen pregnancy rate for ages 10-19 was 31.2/1,000 decreasing to 26.7/1,000 in 2010 and 24.7/1,000 in 2011 (Tennessee Department of Health, n.d.). For ages 15-17, the state teen pregnancy rates were 29.6/1,000 for 2009, declining to 24.8/1,000 in 2010 and a falling to an all-time low of 22.4/1,000 in 2011 (Tennessee Department of Health, n.d.). For Henry County, the teen pregnancy rate for 10-to 19-year-olds was 31.8/1,000 and 19.5/1,000 for ages 15-17 in 2009 (Tennessee Department of Health, n.d.). The 2010 teen pregnancy rates increased to 32.4/1,000 for ages 10-19, while a further decline to 14.6/1,000 was experienced for ages 15-17 (Tennessee Department of Health, n.d.). In 2011, Henry County also experienced a significant decrease in teen pregnancy rates to 23.3/1,000 for ages 10-19, but a substantial increase was shown for ages 15-17 rising to 25.9/1,000, the highest it had been in 3 years (Tennessee Department of Health, n.d.). Henry County experienced another significant rise in rates to 32.0/1,000 for 2012 (Department of Health Policy, Planning and Assessment Division of Health Statistics, 2012; Tennessee Department of Health n.d.). See Table 1 below for a comparison of teen

pregnancy rates for Henry County and the State of Tennessee for years 2007 through 2012.

Table 1
Teen Pregnancy Rates: Years 2007-2011

Ages	Henry County (10-19)	State Tennessee (10-19)	Henry County (15-17)	State Tennessee (15-17)	Henry County (10-14)	State Tennessee (10-14)
2012	27.5/1000	23.1/1000	32.0/1000	21.2/1000	0/1000	0.7/1000
2011	23.3/1000	24.7/1000	25.9/1000	22.4/1000	0/1000	0.7/1000
2010	32.4/1000	26.7/1000	14.6/1000	24.8/1000	1.1/1000	0.8/1000
2009	31.8/1000	31.2/1000	19.5/1000	29.6/1000	1.1/1000	0.9/1000
2008	31.5/1000	33.8/1000	30.3/1000	33.6/1000	1.1/1000	1.2/1000
2007	39.2/1000	34.4/1000	38.0/1000	34.3/1000	2.1/1000	1.3/1000

Note. Adapted from The Tennessee Department of Health, n.d.

The 2009 Henry County teen pregnancy rate of 31.8/1,000 for ages 10-19 was the catalyst for the approval and adoption of the MMH for the HCSS because the county ranked 17 out 95 counties in Tennessee for the highest adolescent pregnancy rates (Department of Health Policy, Planning and Assessment Division of Health Statistics, 2012; Tennessee Department of Health n.d.). Following adoption of the MMH, *Healthy and Responsible Relationships Model for HIV, STIs, and Pregnancy Prevention* program, the teen pregnancy rate for 2010 declined to 14.6/1,000, for ages 15-17, but another increase was experienced in the 10-19 age category to 32.4/1,000, which was well above the state rate for that year (MMH, 2011). At that time, the CSH director and the state CSH department purchased the MMH modules for Grades K-8 and *The Wonder of Puberty* and the *HIV, AIDS, and other STDs* modules to be used in those grades as well (Department of Health Policy, Planning and Assessment Division of Health Statistics, 2012; MMH, 2011; Tennessee Department of Health, n.d.).

According to the 2011 teen pregnancy statistics, a significant decrease was experienced from 32.4/1,000 to 23.3/1,000 for ages 10-19, climbing from 14.6/1,000 to 25.9/1,000 (Department of Health Policy, Planning and Assessment Division of Health Statistics, 2012; Tennessee Department of Health n.d.). This created confusion, concern, and dialogue within the community and organizational key stakeholders, which extended into this year when there was another significant increase in Henry County's teen pregnancy rate to 32.0/1,000 females, ages 15-17 (Tennessee Department of Health, n.d.). According to unofficial local data, the teen pregnancy rate is forecasted to rise even more for 2013, due to the number of pregnancies experienced within the community and organization within the last couple of years.

Henry County has exceeded national benchmarks in teen pregnancy rates for the last 4 years (Robert Wood Johnson Foundation [RWJF], 2013). According to the Community Health Status Indicators (CHSI) measures of birth and death, in 2009, Henry County's low birth weight was 8.9% above the national percent of 8.2 and the Health People 2010 target of 5.0 (.S. Department of Health and Human Services, n.d.). For that year, the county also experienced an infant mortality rate of 11.0, which was higher than the national rate of 6.9 and doubling the 2010 target of 4.5 (U.S. Department of Health and Human Services, n.d.). The CHSI placed Henry County in unfavorable status as compared to peer counties as well as compared to U.S. rates for low birth weight, births to women under 18, infant mortality (White non-Hispanic, neonatal, postneonatal categories), and for several other health indicators beyond the scope of this paper (U.S. Department of Health and Human Services, n.d.).

The teen birth rates in the United States are the highest in the most developed countries of the world (Baird & Porter, 2011; Planned Parenthood, 2012). Even though the teen pregnancy rates are reaching all-time lows in the United States, there are still over 300,000 teen pregnancies occurring annually in the United States, of which 82% are unintended (Guttmacher Institute, 2012). Despite the recent declines, 3 out of every 10 teens still experience pregnancy in the United States (Planned Parenthood, 2012). The 82% decline experienced in the United States since 2002 can be attributed to improved contraceptive use, increased abstinence, and adolescents substituting other kinds of sexual activity for vaginal intercourse (Planned Parenthood, 2012).

In 2011, there were 329,797 babies born to women ages 15-19 and 305,420 for 2012 in the United States (CDC, 2012; U.S. Department of Health and Human Services, 2013). This is a decline in comparison to teen pregnancy rates experienced in 1991, which was estimated to be over 740,000 pregnancies with only 57% ending in a live birth (CDC, 2012). There has been a consistent decline noted in teen pregnancy rates from 1991-2009, except for a brief increase in 2006-2007 (CDC, 2012). The teen pregnancy rates appear to be on a downward trend in the United States. In 1991, the teen pregnancy rate was 61.8/1,000 and declined 39% to 37.9/1,000 in 2009 (CDC, 2012). Additionally, there was another historic low for teens ages 15-19 further declining to 29.4/1,000 (CDC, 2011a; Hamilton, Martin, & Ventura, 2012).

The YRBS for 2013 reported that nearly half (47.4%) of high school students nationwide initiated sexual activity by the 12th grade, which significantly declined from 1991 (54%) to 2001 (46%), but has remained relatively stable from 2001 to 2011 (CDC,

2014c). The prevalence of ever having sexual intercourse decreased during 1991-2001 (54.1%-45.6%), but no significant change was seen during 2001-2011 (45.6%-47.4%), as well as from 2009 (46.0%) to 2011 (47.4%; CDC, 2011c). The CDC (2011c) stated, "The percentage of students who reported ever having sexual intercourse differed by grade, with 33% of 9th grade, 44 % of 10th grade, 53% of 11th grade, and 63% of 12th grade students reported ever having sexual intercourse with 6.2% of students reporting having sex before the age of 13" (p. 25). The prevalence of sex varies by gender and race with rates of sexual intercourse found to be overall higher among Black students (60%), Hispanic students (48.6%), and White students (44.3%; CDC, 2011c). Overall, males (49%) are more likely to have sex than females (46%; CDC, 2011c). Among race, 67 % of Black, non-Hispanic male students reported ever having had sexual intercourse, compared with 54% of Black, non-Hispanic female students; 53% of Hispanic male students reported ever having had sexual intercourse, compared with 44% of Hispanic female students, 44% White male students, and 44.5% of White female students (CDC, 2011c).

According to the 2013 YRBS, 34.0 % of students surveyed had sexual intercourse with at least one person during the previous 3 months (CDC, 2014c). Of the 34.0 % of currently sexually active students, 19.0 % reported using birth control pills; 59.1% reported using condoms; and 25.3% reported using Depo-Provera, Nuva Ring, Implanon, or IUD, while 13.7% did not use any preventive method to prevent pregnancy (CDC, 2014c). Although condom use did increase from 46% in 1991 to 63% in 2003, a decrease was seen from 2003 to 2013 from 63.0% to 59.1% respectively (CDC, 2014a, 2014c).

The trends of the teen pregnancy rates across the United States have been associated with trends in the behavioral determinants of pregnancy. According to the National Survey of Family Growth (NSFG) data, there has been a long-term downward trend in the percentage of teens who are sexually experienced and an upward trend in the use of contraception at first intercourse (CDC, 2014b; Curtin, Abma, Ventura, & Henshaw, 2013; Hamilton et al., 2012).

Henry County public health officials must address the rising teen pregnancy rate. Teen pregnancy is a national concern, and more than 300,000 teenage girls, ages 15-19, give birth each year in the United States of which 82% are unintended (CDC, 2011a, 2011b; Finer & Henshaw, 2006). Healthy People 2020 set goals and health indicators addressing the issue of teen pregnancy in efforts to promote a healthier quality of life and development of healthy behaviors across all life stages. This includes

> Assisting this nation's adolescent population to attain a longer, higher quality life free of preventable disease, disability, injury, and premature death by eliminating health care disparities and improving the health of all groups, by creating social and physical environments that promote good health for all. (Healthy People 2020, 2013, www.healthypeople.gov/2020/topics-objectives/topic/Adolescent-Health)

It is imperative for communities and organizations to work toward the prevention of unintended pregnancies in the adolescent population in order to decrease the social, emotional, physical, and societal not only for the teen mother, but also for the children of teens, teen fathers, and society. Even though the rate of adolescent and teen girls having

babies during the last 20 years has dropped, there is still much to be done due to the impact teen pregnancy has on the future of the nation's children (CDC, 2011a, 2011b, 2011c).

Physical, Social, and Environmental Consequences of Teen Pregnancy

Behavior patterns established during adolescence determine their health status and risks for certain health and social problems, such as teen unplanned pregnancies (Healthy People, 2020, 2013; McNeely & Blanchard, 2009). Adolescent sexual activity is associated with emotional, social, and physical health risks and places youth at risk of becoming pregnant and contracting STIs or HIV/AIDs (Dunne et al. 2007; Gottlieb et al., 2008). Meanwhile, delaying sexual initiation is associated with a decrease in the number of lifetime sexual partners, and decreasing the number of lifetime partners is associated with a decrease in the rate of STIs, HIV/AIDS, and unintended pregnancy (Dunne et al., 2007; Gottlieb et al., 2008).

Teen pregnancy is associated with a number of negative risk factors, not only for the mother but also for her child. Births resulting from unintended pregnancies can lead negative consequences, such as birth defects and low birth weight (CDC, 2007). Children from unintended pregnancies are more likely to experience poor mental and physical health during childhood and have lower educational and cognitive attainment and more behavioral issues in their teen years (Elfenbein & Felice, 2003; Hoffman, 2006; Hoffman & Maynard, 2008). The negative consequences associated with unintended pregnancies are greater for teen parents and their children than their adult counterparts (Finer & Henshaw, 2006).

Moore et al. (2012) and Jemmott et al. (2010) claimed that the potential negative consequences of engaging in sexual risk behaviors at a young age include greater number of sexual partners; teens are also less likely to use condoms and contraception, resulting in a higher rate of STIs and pregnancy. Of the girls who have sex before the age of 15, over half of them will become pregnant (Moore et al., 2012). Additionally, Kaplan et al. (2013) reviewed the social and environmental factors associated with adolescent and teen early sex and found that these teens are more likely to be engaged in other high-risk behaviors, such as having multiple partners, lower levels of condom use, increased likelihood of STIs, as well as unintended pregnancy.

There are social and economic costs of teen pregnancy and childbearing. In 2011, teen pregnancy and childbirth accounted for nearly $9.4 billion in costs to U.S. taxpayers for increased health care and foster care, increased incarceration rates among children of teen parents, and lost tax revenue because of lower educational attainment and income among teen mothers (National Campaign to Prevent Teen and Unplanned Pregnancy, 2014). The majority of these costs were associated with negative consequences and health outcomes for the children of teen mothers (AHRQ, 2010; CDC, 2011b; National Campaign to Prevent Teen and Unplanned Pregnancy, 2011). The AHRQ (2010) stated that the decline in Tennessee's birth rate between 1991 and 2010 has saved the U.S. taxpayers an estimated $12 billion for 2010 alone over the costs that would have been incurred if the pregnancy rates had not decreased. Teenage pregnancy and childbirth also creates social costs that society often ends up bearing (i.e., medical care, welfare, housing, food, lost income. etc.; AHRQ, 2010; CDC, 2011b, 2014a; National Campaign

to Prevent Teen and Unplanned Pregnancy, 2014). Teen mothers are more likely to drop out of school, remain unmarried, and live in poverty than females who delay childbearing until after age 20 (AHRQ, 2010). Teen mothers are 50% less likely to receive a high school diploma by 22 years of age versus 90% of women who had not given birth during the same time frame (AHRQ, 2010; CDC, 2011b, 2014a; Perper et al., 2010). Teen moms will earn approximately $3,500 less per year when compared to those who delay childbearing until their 20s and receive nearly twice as much federal aid for nearly twice as long (Hoffman, 2006; Hoffman & Maynard, 2008). Similarly, early fatherhood is associated with lower educational attainment and lower income (Elfenbein & Felice, 2003; Hoffman & Maynard, 2008).

The children of teenage mothers are more likely to have lower school achievement resulting in higher school dropout rates, have more health problems, give birth as a teenager, be incarcerated at some time during adolescence, and face higher unemployment as a young adult (CDC, 2011b, 2014a; Hoffman & Maynard, 2008). Having parents with low educational levels, growing up in poverty or in a single-parent family, and having poor performance in school increase a teenager's risk for pregnancy (CDC, 2011b, 2014a; Singh & Darroch, 2000). Kaplan et al. (2013) studied a large urban high school, examining sexual risks, across a broad range of ethnic groups. Kaplan et al. found associations of early sex with high-risks behaviors and an increased probability for teen pregnancy among those who are older; Black; of lower income, nonintact families; and live in urban areas, as well as early sex being associated with high-risk sexual behavior, pregnancy, and having been forced to have sex.

Sex Education in Schools

Even though the United States continues to have some of the highest teen pregnancy rates in the developed world, there is still support for abstinence-only sex education in schools. Controversy exists over the education of contraceptives as well as whether abstinence-only or comprehensive programs best support teen pregnancy prevention. Pregnancy prevention education is a familiar approach. For years, schools, communities, and organizations have been developing programs to reduce the negative behaviors of youth, particularly sexual behavior, and trying to decrease teen pregnancy and the other undesirable effects of unprotected sex. Pregnancy prevention in schools provides information about sexuality, reproduction, decision making, and relationship issues. These programs focus on reproductive processes and how to avoid STIs and using abstinence or contraception depending on the type of program used (Hoyt & Broom, 2002).

The support for abstinence promotion programs began in the 1980s with the inauguration of the Adolescent Family Life Act (1996), which included increased federal funding for programs with the exclusive purpose to teach abstinence-only education (Santelli et al., 2006). This resulted in an abundance of abstinence-only programs developed with little to no basis in science, pedagogical theory, or basics of curriculum development. These programs promoted sexual abstinence until marriage and excluded discussions of contraception, except for its failure rate, as the only acceptable lifestyle. Rarely were topics such as puberty, reproductive anatomy, and sexual health discussed (Wiley, 2012). Federal funding for comprehensive, evidence-based programs that use

curriculum-based sex education or youth development approaches to prevent pregnancy did not occur until 2010 (Chin et al., 2012). Prior to that, funding was exclusively for abstinence-only programs, despite the controversy over their appropriateness and little research demonstrating their efficacy. The U.S. government spent over 1 billion dollars supporting abstinence-only until marriage programs from 1996-2010 (Jemmott et al., 2010; Marques & Ressa, 2013).

Abstinence-Only Teen Pregnancy Prevention Programs

This review of abstinence-only educational programs is not considered to be exhaustive as there is an abundance of abstinence-only research available due to federal funding aimed at proving its effectiveness many years ago. Researchers have not demonstrated the effectiveness of using abstinence-only programs in reducing unintended pregnancy due to limitations in the study of methodology, missing data, analysis glitches, and outcome measures being inconclusive or not measuring for unintended pregnancy. However, some scholars have claimed the effects of abstinence-only programs on sexual risk behaviors have a minimal effect and that the initiation of sexual activity is not accelerated by receiving instruction about measures for safer sex (Bennett & Assefi, 2005; Kirby, 2001, 2007, 2008; Kohler et al., 2008; Smoak et al., 2006; Underhill, Montgomery, & Operario, 2007).

Chin et al. (2012) conducted a meta-analyses of 66 comprehensive risk reduction studies and 23 abstinence-only programs and suggested that abstinence education demonstrates reductions in sexual activity similar to comprehensive programs, but no effect was found on sexual risks reduction behaviors. Similarly, in an analysis of the

2002 NSFG including 1, 719 never-married heterosexual adolescents, ages 15-17, Kohler et al. (2008) found that abstinence-only education was not significantly associated with an adolescent ever engaging in vaginal intercourse, and no significant findings resulted in regards to teen pregnancy and abstinence-only educational formats in comparison to comprehensive programs. However, Jemmott et al. (2010) demonstrated that abstinence-only interventions incorporating behavior change theory may reduce the report of sexual initiation and recent sexual intercourse, but not to the degree of programs that incorporate a health promotion aspect. Even though abstinence-only programs did not affect condom use or the number of sexual partners 24 months out from program start, abstinence-only intervention did show promise in the younger adolescents population, but may not be as effective with an older population (Jemmott et al., 2010).

Additionally, the Community Preventive Services Task Force (2009) reviewed 21 group-based, abstinence-only education interventions for adolescents targeting a variety of adolescent groups, delivered in a range of settings, led by adult or peer educators and implemented as single or multicomponent programs. The Community Preventive Services Task Force concluded that abstinence-only programs decreased sexual activity by 16%, but increased the number of STIs by 8% and pregnancy by 12%. The frequency of sex favorably decreased, but was not found to be statistically significant. The task forced concluded that abstinence-only education was shown to have no effect on number of sexual partners, use of protection, and unprotected sexual activity (Community Preventive Services Task Force, 2009). The Community Preventive Services Task Force (2013) reviewed 62 randomized control trials of comprehensive risk reduction and

abstinence education and found insufficient evidence for the effectiveness of group-based abstinence education delivered to adolescents to prevent pregnancy, HIV, and other STIs. The task force found insufficient evidence for recommending abstinence education interventions for adolescents, as well as abstinence-only interventions coordinated with work, vocational training, or coordinated with sports or club participation to reduce sexual risk behaviors (Community Preventive Services Task Force, 2013).

Several researchers have raised concern about abstinence-only programs having the unintended effect of reducing condom use. Some scholars revealed that children who receive abstinence-only interventions are less likely to use condoms if they have sexual intercourse due to abstinence-only education typically focusing on the failure of condom rates instead of their protective properties against pregnancy and sexually STIs (Borawski, Trapl, Lovegreen, Colabianchi, & Block 2005; Jemmott et al., 2010; Santielli et al., 2006). Baird and Porter (2011) claimed that the widespread abstinent movement in the United States has not been the biggest contributor to decreasing the teen pregnancy rates. Baird and Porter (2011) revealed that the 86% decline in teenage pregnancy over the last 2 decades was due to the improved use of contraception because only 14% of the decline in teen pregnancy, ages 15-19, was linked to decreased sexual activity.

Comprehensive Teen Pregnancy Prevention Programs

Scholars are still determining the effectiveness of comprehensive teen pregnancy prevention programs due to federal funding not transpiring until 2010. There is a surplus of research available for review, but much of the literature on comprehensive similarly to abstinence-only interventions speaks of the need to cautiously interpret the findings due

to the lack of rigorously controlled studies; differences in program format; and their implementation, delivery, content, and evaluation methods. The effectiveness of behavior interventions in promoting positive health behaviors and reducing sexual risky behaviors has been recognized, as well as the use of behavior interventions showing favorable outcomes in reducing the number of sexual partners, frequency of unprotected sex, and condom use. However, there is limited generalizable evidence of a reduction in the negative behaviors of youth in the prevention of teen pregnancy with comprehensive programs. This is because the majority of trials were conducted in specific subgroups of a population, and population-level evaluations of the effectiveness of these programs are limited (Kohler et al., 2008).

Kohler et al. (2008) discovered that adolescents who receive comprehensive sex education were significantly less likely to report teen pregnancies than adolescents who receive abstinence-only education, and abstinence-only education was not significantly associated with reduced teen pregnancies when compared to no sex education. These findings are consistent with the findings of Trenholm et al.'s (2007) results from a multiyear, experimentally based impact evaluation, 6-year follow-up study that presented estimated program impacts on youth behavior, sexual abstinence, risks of pregnancy, and STIs. Similarly, Martinez, Copen, and Abma (2011) noted trending in the behavioral determinants of pregnancy being consistent with the declines in their pregnancy rates (ie., a continuation of a long-term downward trend in the percentage of teenagers who are sexually experienced and a long-term upward trend in the use of contraception at first sex.

Kohler et al. (2008) concluded that adolescents who reported comprehensive sex education were significantly less likely to report a teen pregnancy than those who had received no sex education. This effect was not experienced with those reporting abstinence-only education. However, those who reported abstinence-only education did not reduce engaging in vaginal intercourse, whereas those who reported receiving a comprehensive sex education demonstrated a lower likelihood of engaging in vaginal intercourse. Comparably, comprehensive programs that include abstinence, condom/safer sex, and health promotion significantly lead to a reduction in the number of sexual partners (Jemmott et al., 2010), delay in onset of first sex, greater use of condoms and contraception at first sex, healthier partnerships at first sex (Lindberg & Zimet, 2012), and marginal association with reduced reports of vaginal intercourse engagement (Kohler et al., 2008). Moreover, adolescents who report receiving comprehensive sex education are less likely to report a teen pregnancy than those who received no sex education. (Kohler et al., 2008)

The Community Preventive Services Task Force (2012) recommended that group-based behavioral interventions should focus on comprehensive risk reduction interventions and be delivered to adolescents and youth. Educators should coordinate with community services; reduce sexual risk behaviors in adolescents; and promote behaviors that prevent or reduce the risk of pregnancy, HIV, and other STIs. The task force also claimed that group-based comprehensive risk reduction activities reduced self-reported risk behaviors, such as engagement in any sexual activity, frequency of sexual activity, number of partners, frequency of unprotected sexual activity, increased self-

reported use of protection against pregnancy and STIs, and reduced incidence of self-reported or clinically-documented STIs. However, the direct evidence of the effectiveness in reducing pregnancy and HIV was limited. The results from this meta-analysis were favorable but nonsignificant for a reduction in pregnancy, oral contraceptive use, and dual use of condoms and oral contraception (Community Preventive Services Task Force, 2012, 2013). The risk-reduction interventions were applicable to youth ages 10-19, across all populations and races, school and community settings, but appeared to be somewhat more effective for boys than girls (Community Preventive Services Task Force, 2012, 2013).

Chin et al. (2012) conducted a meta-analysis of 66 comprehensive risk reduction studies and 23 abstinence education studies and compared the effectiveness of group-based comprehensive and abstinence education interventions to prevent or reduce the risk of adolescent pregnancy, HIV, and STIs. Chin et al. demonstrated that comprehensive risk reduction interventions are an effective strategy when applied to both middle and high school students across all protective and risk-reducing behaviors evaluated and that the effect was sufficient to result in health improvements for all behavior outcomes. However, the same conclusion and effectiveness could not be applied to group-based, abstinence-only education (Chin et al., 2012).

Lindberg and Zimet (2012) reported overall healthier outcomes for adolescents receiving either abstinence-only or comprehensive sex education. Although receiving abstinence-only education without contraceptive was associated with delayed onset of vaginal sex, it lacked a direct association with sexual and reproductive health outcomes.

Neither type of sex education was associated with earlier onset of sex, greater risk taking, nor poorer sexual and reproductive health behaviors (Lindberg & Zimet, 2012).

The results presented within these studies should not only contribute to advancing the Healthy People 2020 objectives of reducing adolescent pregnancy and also add to the growing science of implementing and testing comprehensive teen pregnancy prevention programs (Kelsey & Layzer, 2014; Koh, 2014; Metz & Albers, 2014). Over the next several years, results from the more than 30 evaluations funded through the Office of Adolescent Health (OAH) TPP Program should better inform whether efforts were effective in reducing teen pregnancies, SITs, and associated sexual risk behaviors. Ultimately, the OAH TPP program will strengthen the capacity for communities to identify and select effective programs that best meet their needs (Kelsey & Layzer, 2014; Koh, 2014; Metz & Albers, 2014) as well as assist in strengthening the validity, fidelity, generalizability, and sustainment of TPP programs nationally.

Effective Programs

Educational programs that include information on the use of condoms and other forms of contraception, while not increasing sexual behavior, delays the onset of sexual intercourse and decreases the number of repeat teen pregnancies and sexual health risk behaviors among students (Chin et al., 2012; Coyle et al., 2006; DiClemente et al., 2004; DiClemente et al., 2009; Jemmott, 2005, 2010; Kirby, 2007, 2008; Shrier et al., 2001; Tortolero et al., 2010). These programs lead to delayed first sexual intercourse, reduced number of sexual partners, decreased number of times that students participate in unprotected sex, and increased condom and contraceptive use (Coyle et al., 2006;

DiClemente et al., 2004; Jemmott et al., 2005; Jemmott et al., 2010; Kirby 2007, 2008; Shrier et al., 2001; Tortolero et al., 2010). Additionally, HIV prevention programs and curricula that encourage the use of condoms has not shown to hasten initiation of sexual intercourse among the adolescents and teen population, which is contrary to what some of the dated literature and critics of sexual health education suggest (CDC, 2011a, 2011b).

Effective programs have common key attributes. The characteristics include using age-appropriate material that is delivered by trained instructors with skill-building components that support healthy behaviors and involve parents and youth-serving and health care organizations to guide the development of curricula and integration of program activities for HIV/STI prevention, not only in schools, but also in communities (Kirby, 2001, 2007, 2008; Kirby et al., 2007; Kirby & Lepore, 2007). Kirby et al. (2007) reviewed 83 studies that measured the impact of curriculum-based sex and HIV education programs on sexual behavior and mediating factors among youth under the age of 25 globally. Significant improvement in one or more sexual behaviors was shown in two-thirds of those programs, and curricula was identified that consistently demonstrated positive behavioral effects when replicated (Kirby et al., 2007). Successful teen pregnancy prevention programs that incorporated certain characteristics to assist in behavior modification led to improving the risk and protective factors that impact decision making regarding sexual behavior (Kirby et al., 2007).

Kirby et al. (2011) claimed that curriculum-based sex and STD/HIV education programs do not increase sexual behavior. Even when condom and contraceptive use is encouraged with sexually active youth, these programs have shown to delay the onset of

sexual intercourse, reduce frequency of sex, reduce the number of sexual partners, increase condom and contraceptive use, and reduce sexual risky behavior (Kirby et al., 2011). Furthermore, effective programs are grounded in psychological, social, behavior, and cognitive theories and research identifying cognitive risk and protective factors that affect behavior. The programs activities have shown to work on changing those factors as well as delineating clear messages pertaining to behavior and skills taught to avoid undesired and unprotected sexual activity (Kirby et al., 2011).

Hoyt and Broom conducted a (2002) review of program components and delivery techniques and found that exemplary programs entailed abstinence education, behavioral skill development, community outreach, contraceptive access, contraceptive education, life option enhancement, self-efficacy/self-esteem education, sexuality, and STIs and HIV/AIDs education. Successful delivery techniques included adult involvement, case management, group discussion, lectures, peer counseling and instruction, public service announcements, role-playing, and video. Programs with a comprehensive approach have the greatest potential for success (Hoyt & Broom, 2002).

Oringanje et al (2010) showed that the concurrent use of education, skill-building, and contraception promotion reduced the risk of unintended pregnancy in adolescents even though the evidence remained inconclusive on any individual intervention alone. Effective comprehensive programs increase the skills of adolescents to avoid health risks and sexual risky behaviors; teach youth to problem solve; communicate with others; plan for the future; and develop positive connections with parents, schools, and communities through addressing multiple unhealthy and risky behaviors provided over a number of

years (Gavin et al., 2010; Hawkins, Kosterman, Catalano, Hill, & Abbott, 2008). Skill development in the Youth Asset-Development Programs, which addressed multiple high-risk behaviors using a variety of delivery processes, was associated with long-term reductions in sexual risky behaviors (CDC, 2011a, 2011b).

Baird and Porter (2011) recommended active engagement of all individuals who have a role in decreasing teen pregnancy, which includes health, education, social service professionals, youth support services, and the voluntary sector. High priority should be given to personal, social, and health education in schools with support from local authority to develop comprehensive programs of sex and relationships in all schools. Developed programs and local strategies need to be centered on giving accurate and effective sexual health advice to young people, including contraception, health promotion, and reactive services (Baird & Porter, 2011). Programs need to include targeted interventions with adolescents at greater risks for teen pregnancy and training of professionals in partner organizations who work with the most vulnerable adolescents and teens (Baird & Porter, 2011).

Kaplan et al. (2013) implied that neighborhoods, communities, organizations, and educational institutions need to create social environments that support youth to make healthy and informed decisions about sexual and reproductive health. Programs are more effective among younger adolescents who have not yet had sex; therefore, sex education needs to begin no later than sixth grade, and programs and policy interventions need to support healthy sexual decisions and outcomes. Healthy relationships and youth development must have priority as a foundation for establishing healthy norms and

behaviors with students receiving age-appropriate, evidence base programs and information (Kaplan et al., 2013).

Baird and Porter (2011) validated that a range of factors need to be in place to successfully reduce the teen pregnancy rates from all social and environmental areas of an adolescent's life. Strong leaders need to be responsible for local strategies in the prevention of teen pregnancy centered on adolescent needs with a focus on targeted interventions for those at greatest risk. Communities, organizations, and agencies need to concentrate on physical, emotional, and social issues surrounding the adolescent's sexual and reproductive health. These programs should include a focus on the factors that lead to teen pregnancy, allow for programs to be put in place to avoid these risk behaviors, and reduce the negative consequences of teen pregnancy (Baird & Porter, 2011).

Sociodemographic Differences and Sex Educational Programs

Teens from different sociodemographic backgrounds have varying results when participating in no sex education, abstinence-only, or comprehensive teen pregnancy prevention programs. Efforts must focus on targeted interventions with adolescents who are at the greatest risks for teen pregnancy. There is a need to train professionals in partnering organizations who work with vulnerable populations in order to provide young people with information on what to do if they experience sexual abuse or other negative health behaviors (Baird & Porter, 2011; Kohler et al., 2008).

Kohler et al. (2008) also found that there were sociodemographic variations related to sex education. Kohler et al.'s study included 1,719 never-married, heterosexual 15-to 17-year-old adolescents. Out of the participants, 9.4% reported not having received

sex education, 23.8% reported abstinence-only education, and 66.8% indicated receiving comprehensive sexual health education (Kohler et al., 2008). There were significant differences found between the type of sex education received with respect to age, income, residence, and family unit intactness (Kohler et al., 2008). Individuals who receive no sex education tend to be from low-income, nonintact families (Singh & Darroch, 2000) and are more likely to be African Americans from rural areas; this population is more likely to have reported engaging in vaginal intercourse in comparison to those who had received some type of formal sex education (Kohler et al., 2008). The students who receive abstinence-only education are typically younger and from low-to-moderate income and intact families, whereas teens who reported having received comprehensive sex education are older, White, and from higher income families living in more urban areas (Kohler et al., 2008).

Additionally, Lindberg and Zimet (2012) found significant sociodemographic variations in the receipt of sexual health education. African Americans and Hispanic American men were more likely to have not received any type of instruction on abstinence or birth control before their first sexual encounter. Individuals who were from lower income had lower maternal education and were African American or Hispanic America, were less likely to receive comprehensive sex education, demonstrated poorer sexual and reproductive health outcomes, and increased rates of STIs and teen pregnancy (Lingberg & Zimet, 2012).

Policy and Law

The chaos surrounding sex education policy compromises the sexual health education of the nation's youth. The majority of sex education policies result in the youth receiving information that is fragmented, insufficient, inconsistent, and typically based on ineffective curricula "due to the morally motivated debates of the appropriateness of comprehensive sex education versus abstinence-only education" (Constatine, 2008, p. #). Until 2010, the government primarily focused on and funded states with initiatives and programs that promoted abstinence-only messages for their sexual health education. This was largely due to the introduction by Congress of Section 510(b) of Title V of the Social Security Welfare Reform Act. This funding was only appropriated for abstinence-only until marriage (AOUM), abstinent-based programs, and state initiatives that taught abstinence-only curriculum; the educational facilities that received funding had to follow specific and strict criteria (Wiley, 2012). In 2001, abstinent-only education received $80 million dollar and $167 million dollar in 2005, increasing even higher to $204 million in 2008, despite the findings that only 9.3% of adolescents ages 15-19 received abstinence-only education and only 20.8% received abstinent-only education in 2002 (Kohler et al., 2008).

For years, decision makers, such as state and local legislatures and local school boards, have developed sex education policies and practices that have been a mixture of science, morality, politics, and personal opinions without considering what science demonstrates as effective policies, practice, and curriculum (Wiley, 2012). Legislators and local board members should research the current evidence focusing on group-based,

comprehensive education interventions verses abstinence-only education to support educational policies. Scholars have not demonstrated that any one particular program or intervention works best or that any specific curriculum or sex education policy results in a significant decline in teen pregnancy (Wiley, 2012). However, evidence does exists to base policies and practices on and should be considered the preliminary steps needed to create an environment in which sexuality is seen as a normal part of human existence and addresses the issue of teen pregnancy as a public health concern and not a moral issue (Wiley, 2012).

Santelli et al. (2006) revealed that comprehensive sex education effectively promotes abstinence as well as other protective behaviors. Additionally, there is no available scientific evidence that meets rigorous scientific standards that demonstrates efficacy in abstinence-only policies and programs (Chin et al., 2012; Kirby, 2001, 2007; Santelli et al., 2006). Focusing on policies and programs that teach only abstinence fosters ethical and human rights concerns. Complete and accurate health information is recognized as a basic human right, and programs and policies that encourage abstinence-only for a basis of health policy and programs should be deserted (Santelli et al., 2006).

Since 2010, there has been a movement toward proving the effectiveness of comprehensive sex education. Millions of dollars has been appropriated by teen pregnancy prevention advocates, such as the Sexuality Information and Education Council of the United States (SIECUS), The National Campaign to Prevent Teen Pregnancy, and Planned Parenthood. These organizations have worked with policy makers in efforts that led to the introduction of the bill to repeal ineffective and

incomplete abstinence-only program funding (S. 578, H.R. 1085). This bill transfers the $75 million in federal funds previously designated for abstinence-only programs to the Personal Responsibility Education Program, which supports teen pregnancy prevention and prevention of STIs. These efforts are believed to be the result of the introduction into federal legislation by policy makers and the Real Education for Healthy Youth Act, which recognizes young peoples' rights to accurate sexual health information (Marques & Ressa, 2013).

The state of Tennessee set forth legislation (i.e., Senate Bill No. 3310, House Bill No. 3621) that provides guidance and directives for FLE (State of Tennessee, n.d.a, n.d.b). FLE programs are only mandated when the county's teen pregnancy rate exceeds 19.5/1,000 females for ages 15-17. The law delineates that if the district fails to adopt a FLE, then the state BOE shall adopt one for the district, but it does not state whether the FLE format should be in the format of abstinence-only or comprehensive. It does prohibit any educational institution in the state of Tennessee to distribute contraception on school property, but elaborates on the need for medically accurate information. Contraception and condom education may be provided as long as it is presented in a manner consistent with "what cannot be taught" in the family life curriculum and informs the student that, while such methods reduce the risk of acquiring a STI or becoming pregnant, only abstinence removes all risk (Department of Education, n.d.b.; State of Tennessee, n.d.a, n.d.b).

Tenn. Code Ann. 49-6-1306 allows for fines to be placed on outside agencies for the representation of FLE in contrast to what is allowed per "what can and cannot be

taught" (Department of Education, n.d.b.). This law created misconceptions within the HCSS and community, and the county's health educators became hesitant to address certain topics, even though the law pertains to outside agencies only and not to HCSS or county health education employees. However, the law does delineate that teachers who teach family life curriculum have the capability of being reviewed by the superintendent if any parent expresses concerns or questions about a sexual education topic presumed to be inappropriate. In July of 2013, the attorney general set forth Opinion No. 13-60, which amended Code Ann. 49-6-1306, and clarified that the county health educators who reside in the department of health could not be fined (State of Tennessee Office of the Attorney General, 2013). This assisted in clarifying Tenn. Code Ann. 49-6-1306 for the HCSS educators and allowed for the county's health educator to return to the public school system to assist in the instruction of FLE topics.

The question of whether comprehensive or abstinence-only sexual health education is most effective at reducing teen pregnancy, HIV/AIDS, and STIs has stimulated much debate locally and nationally for years (Kohler et al., 2008). The Colorado Department of Public Health and Environment (2012), Delaware Health and Social Services Division of Public Health (2011), and the Oregon Department of Human Services Children, Adult, and Families Division (2009) all developed their state sexual health action plans with objectives addressing the need for corrective policy at the national, state, and local level, as well as within communities, organizations, and educational institutions. The key is to develop an unbroken alignment between national, state, and local policies; programs must use health, policy, and educational advisory

boards to review new policies, inform on decisions about inclusive sexuality education at all levels within all districts, keep policy current with national and state policies pertaining to sexuality education, and advocate for the adoption of the national sex education standards at local, regional, state, and national levels (Colorado Department of Public Health and Environment, 2012; Delaware Health and social Services Division of Public Health 2011; Oregon Department of Human Services Children, Adult, and Families Division, 2009).

Moore et al. (2012) addressed the need for sexual risks reduction programs to start at early ages and concluded that it is imperative for policy makers and educators to be aware of and provide sexual risk reduction programs at appropriate age levels. Recommendations included the need for middle schools conducting the YRBS to track trends and to be able to advocate for sex education that is appropriate for their district. These results can assist in the development and adoption of local policies, age-appropriate interventions, and community awareness so that the population has a representation of the behaviors that their youth are participating in (Moore et al., 2012). This falls in line with Barbot's (2012) discussion of the Community Preventive Services Task Force's recommendation for group-based, comprehensive, risk reduction interventions and suggests this as direct evidence for public health professionals, policy makers, institutions, and communities to employ the production and changing of public and institutional policy. These recommendations are justifications that organizational and community stakeholders can use to lobby for policy decisions that reflect and acknowledge the consequences of adolescent and teen sex, as well as the consequences

resulting from the lack of comprehensive, evidence-based risk reduction programs (Barbot, 2012).

It is crucial to provide youth with the knowledge and skills that will help them make informed decisions regarding their sexual behavior and reproductive health. Educational shifts underscore the importance of having evidence on which to base decisions pertaining to sex education policies. Public health professionals, educators, and administrators should demand, advocate, and be held accountable for the use of evidence in policy production and adoption. It is essential that all community and educational stakeholders advocate for continued federal, state, community, and organizational funding for community- and school-based health programs, which provide services that positively affect the youth of the community, as well as advocate for programs and policies that integrate youth-centered health services and provisions.

Imperative to HCSS providing comprehensive sexuality education was a policy consistency with the Tennessee Family Life Educational Laws, the Tennessee Board of Educational Standards for Sexuality and Family Health, and National Sexuality Educational standards. Having national, state, and organizational standards aligned strengthens collaborative relationships among schools, youth, parents, faith organizations, service providers, and local decision makers to promote youth sexual health and provide needed community and organizational needs and resources (Colorado Department of Public Health and Environment, 2012; Delaware Health and social Services Division of Public Health 2011; Oregon Department of Human Services Children, Adult, and Families Division, 2009).

Teacher Support and Barriers

Even though research regarding educators and sexual health programs is currently lacking, some educators believe that controversial subjects should be taught (Eisenberg et al., 2013). Mpanza and Nzima (2010) suggested that most teachers generally have positive attitudes towards teen pregnancy prevention regardless of age, gender, educational level, and religion, which suggests that constructive relationships can be developed between educators, adolescents, and teens. This could be instrumental in the dissemination of sexual health programs. The absence of capacity-building programs minimizes the productive involvement of educators and their effect on the adolescent and teen population (Mpanza & Nzima, 2010).

Eisenberg et al. (2013) revealed that there are teacher barriers pertaining to sex education and the dissemination of teen pregnancy prevention programs. The most common barriers experienced are structural (i.e., a lack of time, financial resources, or curriculum), parental, a lack of training, administrative response, and inconsistent school or district policy. Some teachers feel as if controversial subjects should be taught, and interdisciplinary sexuality education should be included where teachers in multiple subject areas (i.e., science, social studies, history, and literature) incorporate sexuality education into their lesson plans. Sex education curriculum needs to include broader sexuality education topics with rigorous evaluation processes (Eisenberg et al., 2013). Furthermore, policies that restrict the type of sexual health information available to students infringes on students' personal rights (Eisenberg et al., 2013). Teachers have expressed the need for policies to reflect a young person's right to receive accurate health

information and attend a school in an environment where sexuality is seen as a normal part of adolescent development, which requires comprehensive sexuality education programs to include a wide variety of topics (Eisenberg et al., 2013).

Meaney et al. (2009) revealed that teachers are an important part of sexuality education in education institutions. However, many teachers receive little if any formal training on teaching sexual health education (Meaney et al., 2009). This could lead to competence and confidence issues and less effective sexuality instruction (Meaney et al., 2009).

Parental Support

Adolescents who talk to their parents honestly and openly about sex and relationships delay the onset of sexual initiation and are more prone to use contraception when they do become sexually active (Baird & Porter, 2011). Programs incorporating parental involvement, family structure, and adolescent and parental communication and discussions over sexual topics are associated with teens not having sex, delayed onset of sexual intercourse, decreased frequency of intercourse, more consistent use of condoms, and a reduced risk of teen pregnancy. Additionally, parents who do participate in programs to improve communication report increased communication and interaction and are more comfortable in doing so (Lederman & Mian, 2003).

Constatine (2008) and Eisenberg et al. (2008) pointed out that there is public and parental support for comprehensive sexual education programs; parents and community health organizations realize the ineffectiveness of abstinence-only programs and policies and believe that comprehensive programs should begin in middle school or earlier.

Eighty-nine percent of Minnesota parents reported support for comprehensive sex education when compared to abstinence-only education, which was found to be consistent across all subgroups based on age, race, ethnicity, religion, education, political ideology, and income (Eisenberg, 2008). These findings were also consistent with three other researchers who demonstrated parental support for comprehensive sex education in schools (Bleakley, Hennessy, & Gishbein, 2006; Constatine, Jerman, & Huang, 2007; Ito et al., 2006).

Teen Perspective

The user voice in the prevention of teen pregnancy, policy revision, and teen pregnancy prevention programs cannot be overlooked. Jerome, Hicks, and Marx (2009) revealed that teens prefer holistic health education, a dedicated health service for young people that coincides with their lifestyle, and non-clinic-based sexual health services. Adolescents and teens think sex education topics are important to learn about in school and prefer earlier exposure to sexual health topics. Adolescents and teens are generally satisfied with their sexual health teachers and programs, displaying above average satisfaction with knowledge, values, interaction skills, and program characteristics, and lower satisfaction with their personal understanding (Meaney et al., 2009).

Weiss (2012) found that teens have significant insight about teen pregnancy. For some youth in rural counties, teen parenting and pregnancy is considered a social norm; the greatest consequences seen by these youth are school disruption and decreased future success. Weiss suggested that this should call for more education and should sway

communities and school leaders who prefer abstinence-only programs and policies to change the direction of their programs in efforts to decrease rural teen pregnancy rates.

Theoretical Underpinning

Social, Cognitive, and Behavior Change Theory

Social learning theories have been demonstrated to be effective in influencing health-related risky behaviors and allow programs to go beyond the cognitive level and focus on recognizing social influences, building social skills, and changing individual values and group norms (Hoyt & Broom, 2006). The theoretical underpinning for this project included behavior and cognitive learning theories that have been used within the U.S. education system and health care system for many years. Effective programs are grounded in psychological, social, behavior, and cognitive theories, and research assists in identifying the cognitive risk and protective factors that affect behavior (Kirby et al., 2011). If the cognitive risk and protective factors can be identified, activities and programs can be constructed to change those factors and decrease the risky sexual behavior of adolescent, resulting in a decrease in the negative physical, social, and environmental consequences of teen pregnancy (Hoyt & Broom, 2006; Kirby, 2001, 2007, 2008; Kirby et al., 2011).

Behavioral learning theorists focus on behavior modification, reactions, and reinforcement concerned with observable and measurable aspects of human behavior (McEwen & Wills, 2011). Social learning theory is used to examine behavior whereas social influences (i.e., environment, cognitive factors, behavior) affect learning to bring about behavior change (Bandura, 1977). According to Prochaska's and DiClemente's

model of transtheoretical behavior change theory, individuals move through a series of motivational stages before achieving a particular target behavior. Emotional, cognitive, and behavioral processes influence forward movement to bring about the change at each stage. Behavior change is achieved by the use of interventions and strategies tailored for an individual's readiness to change (Hacker et al., 2005).

The cognitive learning theories expand upon behavior theories. The learner's goals, thoughts, expectations, motivations, and abilities that occur in the processing of information are grounded in the learning process. These theories are used to examine how individuals learn and how permanent changes in behavior are accomplished (McEwen & Wills, 2011). The Gesalt view of cognitive learning refers to a person's cognitive ability to make sense of his or her surroundings and "organize the multiple parts contained within, acknowledging that the environment or field is an interrelated system in which any part has the ability to affect all other parts and the whole is greater than the sum of its parts" (McEwen, & Wills, 2011, p. 354). While the cognitive field is related to perception, learning is the restructuring of the learner's perception of all coinciding and reciprocal interaction among all properties within his or her environment. Behavior is the result of the interaction of all aspects within the environment, with perception and learning being based upon life's experiences. Cognitive field theorists are concerned with progressive development, focusing on individual motivation and self-actualization causing a person to change, grow, and develop. As an individual matures, it is the experienced and learned environment that an individual comprehends, processes, and relates to his or her life that leads behavior change (McEwen & Wills, 2011).

Learning is an active and goal-oriented progression of discovering and understanding relationships among people, things, and ideas within a person's own environment after the processing of information occurs (McEwen & Wills, 2011). Behavior, social, and cognitive theorists' emphasis on the interplay of internal and external environment, experiences, behavior, and influencing factors can be applied at the community, organization, or individual level and underpins this project. For community, organizational, or individual behaviors to be changed and new insights gained, individuals must accept responsibility for learning, discovering, and assigning meaning to understand and learn the content. This leads to the individual being able to think more clearly and effectively and solve problems in a variety of situations, using self-actualization as the motivating force that changes human behavior.

Program Logic Model

The logic model, also been termed program theory or theory of change, links community needs/assets, desired results (i.e., outputs, outcomes, and impacts), influential factors (i.e., protective or risk factors), and strategies (i.e., best practices, successful strategies) revealing reasons how and why change strategies will work best for the target population. Programs should be developed based on the issue, the evidence, and the desired results (W. K. Kellogg, 2006). The logic model is a graphic representation that delineates the necessary components of the program, including the relationships among program goals, objectives, activities, and measureable outcomes. Program logic serves as a framework for program monitoring, planning, implementation, and evaluation (Huton, 2007) and guides the evaluation processes through identifying key program elements and

their relationship to each other (Hallinan, 2010). Quantitative or qualitative data can be analyzed and measured against the program logic framework by comparing actual outcomes to intended program results (Hallinan, 2010).

The logic model as an evaluation tool assists in the mapping out of inputs/resources, objectives, and activities to reach the short-, medium-, and long-term goals/health determinants or outcomes specific for the planning phase of the project. Logic models allow for evaluation to occur throughout every phase of the project for all involved; stakeholders can make the necessary revisions if tasks and activities have not been completed or goals have not been met by previously specified timeframes. The logic models allow for the project staff to assess and evaluate the project and revise or expand upon the model as deemed necessary making the necessary checks and balances of project activities, noting if the activities when completed, obtained the goal. It also provides outcome feedback at all times to ensure that outcomes are met or whether changes need to be made. In this study, the logic model was used as an evaluation tool for project progress, process, and success (W.K. Kellogg Foundation, 2004, 2010).

The logic model has been used in teen pregnancy prevention and sexual health programs nationally. Huton (2007) described using the logic model for the evaluation of a school-based teen pregnancy prevention program in the states of Delaware, Colorado, and Oregon in the development, implementation, and evaluation of their respective state's sexual health plans (Colorado Department of Public Health, 2012; Delaware Health and Social Services Division of Public Health, 2011; Oregon Department of Human Services Children, Adult, and Families Division, 2009). Additionally, Kirby et

al.'s (2011) theoretical framework for developing and adapting curriculum-based programs also included a logic model and implicated that the development of a logic model is one of the 17 characteristics of effective curriculum-based sex education programs. The behavior-determinant-intervention logic model, developed by Kirby in 2004, was made for programs focused on teen pregnancy prevention (Delaware Health and Social Services Division of Public Health, 2011). Hallinan (2010) noted how easy it is to link inputs to the activities driving the program; continuous monitoring of the program model allows for program remodeling and improvement. Hallinan also demonstrated how the inputs and activities facilitate change and how the logic model can be used to evaluate outcomes that justify and validate the available resources, program development and sustainment, and continuous funding provisions.

Background and Context

The HCSS is comprised of five schools. There are three outlying schools strategically placed within the county for students who do not live within the city limits of Paris, Tennessee, that serves Grades K-8. There are two county high schools, which are located within the city limits of Paris. One of the high schools contains ninth grade, and the other school contains Grades 10- 12. There are three Paris city schools, which feed into the county's high schools as well. The total population of the county's school system is over 3,100 students from culturally diverse, but predominantly White and socioeconomically deprived populations (Tennessee Department of Education, 2013). There are 200 African American and approximately 80 Hispanic American students.

Approximately 65% of the student population qualifies for free or reduced lunch (Tennessee Department of Education, 2014a).

A board of directors, consisting of five members, set policies for the HCSS. Administrative personnel included a director and assistant director of schools, director of curriculum and instruction, director of coordinated school health, director of nursing, director of federal projects, director of adult education, and several others, which reside over the departments of family resource, service learning, technology, transportation, and maintenance. Of the five schools, each has one central principal and one to three vice-principals per school depending on the school's size. The HCSS is also comprised of numerous administrative assistive personnel within each of the schools, and departments employ over 200 educators, nine school counselors, and five nurses.

The CSH program's conception began as a pilot project in 1987 when the federal government and the surgeon general charged the CDC to come up with an evidence-based model that would deter the declining health of the nation. Since then, the CDC has funded over 20 states to support the development of coordinated school health initiatives. In 1999, the Tennessee legislature was lobbied to use the state's tobacco settlement money to fund CSH. With the passage of T.C.A. 49-01-1002, The Coordinated School Health Improvement Act (2000), authorization and funding for CSH was established in Tennessee. In 2001, the Office of Coordinated School Health (OCSH) was established by the Tennessee Department of Education and was designated to provide support for 10 pilot sites within the state of Tennessee; HCSS was one of those pilot sites (R. Johns-

Womack, personal communication, July 30, 2014; Tennessee Department of Education, 2014b).

The governor stated that if the CSH programs could demonstrate positive outcomes, he would make it a law for the state of Tennessee to fund CSH programs. Therefore, in 2006, Public Chapter 1001, the Coordinated School Health Expansion and Physical Activity Law, was established and 15 million dollars in funding was allocated to fund and expand CSH programs in each educational district within Tennessee. This law created a physical education specialist and a CSH position within the Tennessee Department of Education and mandated 90 minutes of physical activity in Grades K-12. All Tennessee public school systems implemented CSH for the 2007-08 school year. Since then, the office of CSH has obtained additional funding from the CDC. To this day, Tennessee is the only state that has a CSH program funded in all counties and learning educational agencies within the state (R. Johns-Womack, personal communication, July 30, 2014; Tennessee Department of Education, 2014b).

CSH encourages healthy lifestyles, provides needed support to at-risk students, and helps to reduce the prevalence of health problems that impair academic success. CSH is bound by the involvement of parents, families, and community. Full involvement of these entities as partners in the educational process provides input, increases the commitment of all partners, and ensures positive educational and health outcomes. The CSH's approach consists of eight major components: health education, health services, counseling, psychological and social services, nutrition, physical education/physical activity, school staff wellness, healthy school environment, and

student/parent/community involvement. By definition, all CSH components work together to improve the lives of students and their families. Although these components are listed separately, it is their composite that allows CSH to have a significant impact (Tennessee Department of Education, 2014b).

Student Role

My role within this project was solely one of student, project researcher, and one of the project leaders. I had no direct affiliation with the organization other than my children who were enrolled within the HCSS for 10 years. I worked within the primary care/family practice sector, recently leaving pediatrics due to a long commute. Over the past 10 years, I have been employed within a facility where I was in the dual practice of family practice and midwifery, later moving to a local university school health and taught physician assistant students physical assessment, clinical skills, obstetrics/gynecology, and pediatrics.

Because I resided in a small rural sector of West Tennessee, there were no DNP-prepared practice nurses within a 120-mile radius and finding a preceptor with such credentials was difficult. The only PhD nurses were education-related at a nearby university. Because I worked there at the time, I felt compelled to search local and regional health departments for appropriate mentor credentialing and project content that not only used my knowledge and experience, but would allow me to grow in a content area of administration and school health that would be beneficial to the community of which I resided. After several conversations with the local county nurse educator for Henry County, she directed me to the CSH department within the county's school

system. The CSH department houses all federal, state, and local aspects of health and wellness, disease prevention, safety, and professional development that affect all individuals within the organization, as well as the department of nursing. After several meetings with the CSH director and the director of nursing discussing my experience and knowledge, and all of the current issues affecting the organization, it was decided that teen pregnancy was the issue to be addressed for my project. My preceptor was approved by Walden University and I began my practicum shortly thereafter.

Summary

Over the past few years, Henry County's teen pregnancy rates have increased, despite the fact that national and state teen pregnancy rates have decreased. Currently, the county's teen pregnancy rate sits at 32.0/1,000, which is an increase from the 2011 rate of 25.9/1,000 and 2010 rate of 14.6/1,000 (Tennessee Department of Health, n.d.). Tennessee's teen pregnancy rates for 2012 were 21.2/1,000, which was a decrease from 22.4 for 2011, and even a further decrease from 2010 rate of 24.8 (Tennessee Department of Health, n.d.). The 2012 rate of 32.0/1,000 places Henry County 10 out of 95 counties with the highest teen pregnancy rate. This placed Henry County at risk for state-scrutinized programs and processes if the county did not have an FLE policy and teen pregnancy prevention plan in place. The state considers any rate above 19.5/1,000 to be of epidemic proportion (Tennessee Department of Health, n.d.). In order to implement the comprehensive teen pregnancy prevention program adopted several years ago, the FLE policy needed to change to reflect a comprehensive sex education policy instead of a policy in support of abstinence-only.

There are many factors to consider when instituting sex education within a school curriculum. Teen pregnancy prevention programs that have been deemed successful incorporate certain characteristics to assist in behavior modification leading to improved risk and protective factors impacting decision making regarding sexual behavior. The science and research that supports curriculum-based sex and STD/HIV education programs is current and demonstrates that educational programs, which consistently support the use of condoms and other forms of contraception, does not increase sexual behavior, but instead delays the onset of sexual intercourse and reduces the number of sexual partners, sexual risks behaviors, repeat teen pregnancies, and unprotected sexual participation, as well as increases condom and contraceptive use.

While the Tennessee state law does set restrictions on "what can and cannot be taught" in sex education, it is in support of comprehensive sex education and expands on the need to provide medically accurate information. (NASBE, 2013) Additionally, the HCSS FLE policy was vague and dated. It was adopted in 1999 and stated that "Instruction of family life education shall emphasize that abstinence from sexual relations is the only method of protection that is 100% effective" (Henry County Board of Education, 2001, http://www.boardpolicy.net/documents/detail.asp?iFile=4770&iType=4 &iBoard=45). The FLE policy lacked essential evidence-based components that are demonstrated to produce positive outcomes, which could be accounted for its ineffectiveness and the rising teen pregnancy rates.

Scholars have stressed the need for evidence-based school program and policy alignment with state and national sexuality education standards. Consistent national,

state, and organization standards have shown to strengthen the collaborative relationships between schools, youth, parents, faith communities, service providers, and local decision makers. Additionally, parents and youth are key in mending the dysfunctional policies across this nation to armor children with the best possible sex education available. They are critical stakeholders in the health and educational policy-affecting adolescents and teens and influencing school officials and boards of education to ban political mandates based on religious backgrounds, political orientation, or the vocal minority so often experience.

There is a need for interdisciplinary sexuality curricula development, encompassing broader sexuality education topics, that allows teachers in multiple subject areas to incorporate sex education into their lesson plans where sexuality is understood to be a normal part of adolescent development. When regulating the allocation of resources, and the formation and adoption of equitable and evidence-based policies that reflect the health care and educational needs of youth, it is imperative that the youth and families of communities have access to resources and opportunities that ensures access to accurate and age-appropriate health information. National, state, and local policies and laws need to reflect youth as consumers of their own health care and respect their need for youth-friendly services, not denying them the basic human right of receiving accurate and complete health information.

It is essential that adolescents and young adults adopt healthy behaviors during the developmental periods of their lives. Adolescent health behaviors are established early and are grounded in their social surroundings; this needs to be understood by all

community and organizational stakeholders. Imperative to effective programs and program development is the identification of factors that have an impact on behavior and whether the activities bring about behavior change. In this project, I identified activities that were imperative to the workings of educational sexual health policy change, as well as the processes that were involved in the planning of implementation and evaluation plans. I also demonstrated the facilitating factors and barriers that led to successful policy development and adoption, as well as implementation and evaluation plan development for the newly adopted policy. This project should streamline the transition for future program implementation and evaluation plan development and processes for the larger community initiative of full dissemination and evaluation of the Michigan model for health (the teen pregnancy prevention program that was adopted by the HCSS BOE several years ago). The findings should improve efforts to decrease adolescent and teen pregnancy in the educational and community settings.

Inherent to the nursing profession, school nurses, educators, and administrators is the need for continuous review of the literature in search for evidence-based practices. Nurses are instrumental in developing an understanding of teen pregnancy prevention strategies and translating the evidence into the educational, community, and health care settings. This project's insights and recommendations should encourage nurses to be more persuasive to community and school leaders who prefer abstinence-only education, be bolder in initiating conversations about consequences of pregnancy and the need for safe sex practices, and lobbying for educational institutions to lead their educational facilities with evidence based practice programs that have demonstrated effectiveness.

Advanced practice nurses are on the front line in their efforts to promote safe sexual practices and can join forces with parents, community organizations, and schools to focus on adolescent and teen lifetime success academically, socially, emotionally, and financially through lobbying efforts to change local, state, and national policies that effect the current and future sexual health of the nation's youth.

Nurses in educational institutions could mirror this project's approach in addressing other health issues within educational institutions, such as obesity, violence, bullying, or drug use because those also result from negative health behaviors. This project added to the existing body of the collaborative workings and knowledge that take place within communities and organizations and assist in clarifying processes pertaining to the education of sexual health, educational institutional policy change, and implementation and evaluation plan development using many facets of the program logic model. Integrating the research with population and community needs is key to guiding nursing and educational practice as well as national, state, and local policies in all processes affecting teens and adolescents.

My role within this project was solely one of student, project researcher, and one of the project leaders; I had no direct affiliation with the organization. I was employed within the community as a primary care-family practice provider. My efforts within the HCSS were directed at changing the FLE policy in order to change the way sex education is taught within that school system. Through the development of practice guidelines, and the development of an implementation and evaluation plan using organizational and community coalitions, this project has the capability to change the future behaviors of

youth. Furthermore, this project was successful in laying the foundation for the larger community initiative of full MMH program implementation and evaluation. If implemented and evaluated as the literature suggests, the organization and community should see a reduction in the teen pregnancy rate, a delay the onset of sex for nonsexually active youth, and an increase in contraceptive use among sexually active youth by 2017 in Henry County, Tennessee.

Section 3: Methodology

Introduction

The teen pregnancy rate for teens ages 15-17 in Henry County, Tennessee, has risen to 25.9/1,000 in 2011 and 32.0/1,000 for 2012 despite the adoption of an evidence-based teen prevention program several years ago (Tennessee Department of Health, n.d.). The problem addressed within this project was the rising teen pregnancy rates because any rate above 19.5/1,000 for ages 15-17 is considered to be of epidemic proportion (Tennessee Department of Health, n.d.). The purpose of this project was to develop a comprehensive evidence-based FLE policy for adoption by the BOE termed Abstinence-Centered Plus Contraception. A collaborative, organizational, and community project team assisted in the development and adoption of the policy, practice guidelines, and the development of a policy implementation and evaluation plan. These processes paved the way for the larger community and organizational initiative of implementation and evaluation plan development of the MMH into the educational curriculum for Grades K-12 by July 2015. This date was chosen so that full dissemination and evaluation processes of the MMH can begin in August of 2015 in order to attain the third and fourth objectives of the Teen Pregnancy Prevention FLE Action Plan shown in Appendix A.

Approach

In this project, I focused on the revision of a FLE policy to a more comprehensive evidence-based policy that underpins the comprehensive teen pregnancy prevention program currently adopted. The project's design was qualitative in nature with a descriptive account of the actions, activities, and processes entailed in changing

educational policy at the institutional level. In this project, I also explain the processes involved in the development of a project team, policy, practice guidelines, expert content validation, and the implementation and evaluation plan development for the policy. In this section, I outline how the project accomplished these activities, using the following steps, which is also shown in Appendix B.

1. Assemble a community and organizational stakeholder project team
2. Guide project team in a review of literature and other available evidence
3. Develop new comprehensive FLE policy and practice guidelines
4. Validate policy, practice guidelines
5. Obtain board approval of new FLE policy and practice guidelines
6. Develop implementation plan for the newly adopted policy
7. Develop evaluation plan for the newly adopted policy

The processes entailed project team development, policy revision, practice guideline development, content validation, and the development of an implementation and evaluation plan that was monitored through the use of a program logic model. Due to the nature of this project and paper, the HC TPP overall logic model is the only program logic model included in Appendix C. Additional and separate logic models were developed for each of the individual objectives corresponding to outcomes that detail tasks and activities to be completed within certain time constraints. Appendix C includes the overall logic model developed within the time frame of this project. The program logic model allowed for organizational and community stakeholders and project leaders to understand where the project was at any given time and whether there were

deviations in the overall plan. It allowed for adjustments to be made to prevent any undesirable effects on the short-term and long-term program outcomes. The logic models articulated objectives and activities enabling the intervention teams to see early on if the processes were being put into place as designed. This was not only seen to be an instrumental component in the planning processes of this project, but also could have affected the actual implementation and evaluation effectiveness and efficiency processes long term within the larger community and organizational initiative. Looking ahead, a program logic model developed throughout every phase of the larger community and organizational action plan will provide a blue print for the development of the MMH implementation and evaluation plans and the actual implementation and evaluations processes for the larger community and organizational initiative.

Project Team Assembly

There was a need to develop an organizational- and community-based coalition for the development of the policy, practice guidelines, and the implementation and evaluation plan for the newly adopted policy. Team members were chosen for their knowledge and experience and consisted of key organizational and community stakeholders, such as school nurses, counselors, educators, administrative personal, and members from the target population. Community team members consisted of community educators, health care personal (i.e., nurses, providers, social workers), counselors, key organizations that worked with this population (i.e., Family Resource Center, Tomorrow's Hope), and parents. Also desired was a state-coordinated school health

official due to his familiarity with the teen pregnancy issue within this county as well as his expertise of the MMH program and TPP, STIs, and HIV/AIDS prevention strategies.

Essential to the success of the project and development of the policy was the need to determine individual team member preference regarding FLE and policy (i.e., Abstinence-Only, Abstinence-Centered, or Abstinence Centered Plus Contraception) in order to not impede policy development, adoption, and implementation. Due to the nature of this project, it was also necessary to separate the project team into subcommittees for the development of the policy implementation and evaluation plans to ensure that project objectives and tasks were completed in a timely manner. For completion of the tasks allocated in the policy implementation and evaluation plans, shown in Appendices H and I, the project teams would need to be further divided into task-specific subcommittees in order to continue momentum and assure that the policy is fully implemented and evaluated as planned. A logic model should be developed for each objective for program and process monitoring. Additional age-specific subcommittees and logic model development will be required for the larger organizational and community initiative of developing implementation and evaluation plans for the MMH.

Assembling the project team entailed planning, attending, and speaking at key community and organizational gatherings and meetings to present the teen pregnancy issue within the county, pregnancy statistics, current policy, evidence-based policies and programs, evidence-based literature pertaining to the issue, and the currently adopted and proposed use of the comprehensive Michigan model for health TPP. There was a need to

ensure that key organizations, coalitions, and individuals were present in order to gain support for the comprehensive Abstinence-Centered Plus Contraception FLE policy change as well as to elicit team members to assist in moving the initiative forward. This process was measured by meeting dates, copies of agenda, and attendance roosters of key organizational and community meetings including key stakeholders, verbal or written acknowledgement, and acceptance of project team placement.

Review of Literature and Evidence

The project team was guided through a review of the literature and other available evidence demonstrating best practices in FLE policy, practice guidelines, evidence-based TPP programs, and the processes entailed for development of the policy formation, practice guideline development, policy implementation, and evaluation in the development of practice guidelines, implementation, and evaluation plans. It was also necessary to educate the project team on the needs and assets of the community, organization, target population, and existing program, as well as what specifics need to be taken into consideration for the development of the larger initiative of MMH implementation and evaluation plan. The project team was also guided in specifics regarding the CSH grant, objectives, and activities specific to teen pregnancy prevention, shown in Appendix D, the overall CSH TPP action plan process for program outcome and program impact, shown in Appendix A, and the need for process monitoring via program logic model shown in Appendix C.

Review of the literature entailed numerous community and organizational meetings with the preliminary educational settings being the procurement of in-service

and professional development days, which had to be approved by the director of curriculum and supervisor of instruction. The meeting agendas also included discussion over the increasing teen pregnancy rates, perceived reasons for the increase, the negative consequences of teen pregnancy, current outdated policy and its vagueness, introduction of the three types of policies formats (i.e., Abstinence Only, Abstinence-Centered, Abstinent-Centered/Based plus Contraceptive) as well as their components and what researchers have demonstrated to be an effective evidence-based comprehensive teen pregnancy prevention program. This process was measured by meeting dates, copies of agenda, and attendance records.

Policy and Practice Guideline Development

Development of FLE policy and practice guidelines encompassed delineating what topics could and could not be taught regarding FLE within the HCSS. The developed policy and practice guidelines were based on documents set forth by the Tennessee Department of CSH that delineated the appropriate topics to be taught for each of the FLE formats (i.e., Abstinence-Only, Abstinence-Centered and Abstinence-Centered Plus Contraception). These documents also linked topics to the state board of education standards for family life, health, and wellness for the state of Tennessee.

The policy developed was comprised bylaws specific to the Abstinence-Centered Plus Contraception format only, which is shown in Appendix E. The Abstinence-Centered Plus Contraception was the policy desired by the majority vote of the CSH advisory council. Each of the three formats built upon each other so the content of the Abstinence-Centered Plus Contraception includes the content from the two less

comprehensive FLE formats. Even though all three formats were presented to the BOE, the council felt as if it would be an easier fix to delete components of the policy if one of the other two formats was chosen.

Practice guidelines were developed specific to each of the FLE formats and were submitted to the board. The county's BOE determined which practice guidelines would be used. The practice guidelines are shown in Appendix F. The practice guideline development for each of the FLE formats was instrumental to the BOE adopting the most comprehensive policy format. The board knew what content would be covered if the Abstinence-Centered Plus Contraception format were adopted. Additionally, the practice guidelines provide support when the project teams begin the processes of implementation and evaluation plan development for full dissemination of the MMH.

The project team put forth a collaborative and cohesive effort in analyzing, revising, and developing the proposed comprehensive FLE policy and practice guidelines prior to board submission for the adopted FLE policy. This process included the project team leaders examining and evaluating other comprehensive FLE policies adopted within other states, as well as rural and urban districts within Tennessee. The project team leaders developed the first draft of the proposed policy and practice guidelines. Next, the project team reviewed, made recommendations for change, and then approved the final product for board submission. The policy and practice guidelines then went before the CSH council for further review, revision, and approval prior to presenting the final product to the administration of the HCSS. Then the products were given to the assistant

director and director of schools and other content validity experts to review and approve prior to being placed on the next BOE meeting agenda.

Development and adoption of a supporting FLE policy and practice guidelines encompassed meetings with the CSH advisory council (HAC), superintendent of HCSS, school administrators, and the assistant director of schools, who worked with policy development and revision, and finally to the BOE for approval. Additionally, a policy brief shown in Appendix G was key to introducing the issue to board members. This process of policy and practice guideline development required multiple meetings, e-mails, and telephone conversations regarding allocation of content and the procurement of an in-service or professional development days, which were approved by the director of curriculum and development and supervisor of instruction. This process was measured by school calendars; meeting agendas; minutes and attendance roosters; key organizational and community stakeholders reporting a change in the FLE policy supporting the Abstinence-Centered Plus Contraception format; finalized copy of policy and policy brief; majority of HCSS board members; and media, organizational, and community support highlighting the FLE policy change.

Policy and Practice Guideline Content Validation

Validating policy and practice guidelines included gathering key internal organization and external experts in the field of teen pregnancy prevention programs to ensure that policy and practice guidelines aligned with program goals and objectives. Content validity was a key indicator of quality and was intended to check the operationalization against the relevant content. Content validation ensured that the policy

and practice guidelines content was based on the evidence and was accepted within the profession of education, teen pregnancy prevention policy, and practice guideline development. This process allowed for justification, support, and accepted recommendations that are considered standard educational content when educating the youth of Henry County in the prevention of teen pregnancy. Content validation ensured that the policy and practice guidelines directing program implementation and evaluation were designed to ensure that the recommendations for educational content were valid, accurate, and based on scientific evidence that supports FLE policy and teen pregnancy prevention program practice standards (Accreditation Council for Continuing Medical Education, 2012; Alawamleh, Bdah, & Alahmad, 2013; Burns & Grove, 2009; Trochim, 2006).

Key to this process was the project team developing a detailed description of policy and practice guideline content. All of the criteria that should be met within FLE policies and practice guidelines, as well as the teen pregnancy prevention program content, were delineated with specifications of the target groups and with criteria for deciding whether the program was preventive in nature. This information was then reviewed by educationally qualified internal organizational stakeholders (i.e., supervisors of instruction and curriculum development, directors and administrators of schools) and two external scholars in the field (i.e., state CSH health officials) so that the comprised policy and practice guideline content was valid in regards to FLE policy, practice guidelines, and comprehensive sex education programs (Trochim, 2006). This process

was measured by documentation of emails, telephone conversations, meetings dates, agendas, and attendance, as well as final copy of policy and practice guidelines.

Obtaining Board of Education Approval

Obtaining BOE approval of new FLE policy and practice guidelines followed a path typically experienced within educational institutions. First, the policy was presented to the director of schools for review and approval, which actually occurred in the validation of content process. The director then presented to all schools administrators under his directive for review, commentary, and preparation of possible community and organizational controversy. The policy and practice guidelines were given to the assistant director of schools who is in charge of maintaining educational policy for review, as well as development and placement into proper format for BOE submission and review. The director of schools placed the proposed policy change, as well as all pertinent and supporting information regarding the policy change (i.e., policy brief, three types of policy formats), onto the BOE's meeting agenda 1 week prior and was submitted to the BOE members for review. The proposed policy change was introduced and continued through two readings. Then, the policy was voted in favor of the change after the second reading. This process was measured by BOE meeting agendas and minutes, a copy of the final policy and practice guidelines, shown in Appendices E and F, and the final FLE policy posted upon the HCSS policy website (Henry County Board of Education, n.d.).

Implementation Plan Development

Development of the policy implementation plan seen in Appendix H required that the project team members designate certain activities that needed to be completed in order to ensure that the newly adopted policy would be fully implemented. Policy implementation plan development consisted of reviewing the policy and determining what activities were imperative to complete in order to ensure policy implementation and future program sustainability. This process entailed ensuring that the policy was in proper format and was posted on the HCSS Policy Website. The project team, county administration, and supervisor of instruction had to delineate educational days for instruction and subcommittee development. These meetings held were to establish direction and guidance pertaining to bylaws within the policy and to develop any needed procedures, protocols, or standards for organizational and community needs. This process was measured by meeting dates, attendance, agenda, attendance records, and copy of school calendars designating professional educational dates for development of policy implementation plan, as well as the final document delineating policy and practice guideline implementation.

The policy, practice guidelines, and future TPP program needs to entail the approach as the project team moves forward in the development of the MMH TPP program implementation plan. Even though it is not a direct objective of this project, there is a need to ensure program direction in preparing for future tasks. The project team will need to develop subcommittees for the development of an implementation plan. This subcommittee development will be much like the subcommittee development

entitled within policy and practice guideline implementation plan shown in Appendix H. The subcommittee will be comprised of no less than one original project team member, as well as key organizational and community stakeholders, to include the target population and their parents. This process will require that the project coalition form a designated subcommittee, the Teen Pregnancy Prevention Implementation Subcommittee (TPPIS), for Grades K- 5, 6- 8, and 9-12, and delineate MMH modules and individual age-appropriate lessons to be covered within grades, classes, and timeframes. This will have to be completed and submitted for approval by the director of curriculum and development and director of instruction, director of schools, and board approval by the end of the summer of 2015 so the MMH can begin to be implemented for the next school year or at a predetermined date set forth by the project team subcommittees.

This approval will require multiple meetings, telephone conversations, and e-mails regarding allocation of content. The preliminary subcommittee allocation meetings, being the procurement of an in-service or professional development day, will have to be approved by the director of curriculum and development and the director of instruction. This process could be measured by meeting dates and minutes, copies of agenda and attendance of key organizational and community stakeholders, and copies of grade-specific implementation plans with the final copy of the implementation plan to the CSH director, director of nursing, superintendent, community and organizational educators, and to the BOE by a predetermined date.

Evaluation Plan Development

Evaluation plan development for the adopted policy and practice guidelines followed the same path as the implementation plan development. Policy evaluation plan development consisted of reviewing the policy and determining what activities were imperative to complete in order to ensure policy implementation, evaluation, and future program consistency and sustainability. Each of the bylaws set forth within the adopted policy had to be allocated with evaluation paths, designated timeframes, and persons who were responsible to ensure that this activity was complete within a prespecified timeframe. This process was measured by meeting dates, attendance, agenda, attendance records, and a copy of school calendar designating professional educational dates for development of policy evaluation plan, as well as the final document delineating policy and practice guideline evaluation as seen in Appendix I.

It was necessary to prepare the project team in the development of the MMH TPP program evaluation plan. The development of the MMH evaluation plan, not a direct objective for this project but one of a larger community initiative, will entail the development of an evaluation plan for the MMH corresponding to the implementation plan by a predetermined date set forth by the project team. This process will also require the coalition to develop a Teen Pregnancy Prevention Evaluation Subcommittee (TPPES) including key members as discussed above. The subcommittee will be divided into designated subgroups, for Grades K- 5, 6- 8, and 9-12. The evaluation plan will have to be approved by the director of curriculum and development, director of instruction, director of schools, and BOE, as well as possible institutional review board (IRB)

approval depending on the evaluation measures that were set forth in the plan. The project team will also need to be educated in the methods of project monitoring, project outcome, and project impact evaluation measures.

This process will require multiple meetings, e-mails, and telephone conversations regarding the allocation of content over a specified timeframe; preliminary meetings must include the procurement of an in-service or professional development day, which will have to be approved by the director of curriculum and development and director of instruction. This process will be measured by meeting dates and minutes, copies of agenda and attendance of key organizational and community stakeholders, and copies of grade-specific evaluation plans with the final copy of the evaluation plan to the CSH director, director of nursing, superintendent, community and organizational educators, and to the BOE by a predetermined target date.

Target Population

Henry County, Tennessee sits in the northeastern tip of West Tennessee bordering Kentucky with an estimated population of 32, 210 in 2013 (United States Census Bureau, 2014). The county is 33% urban and 67% rural (United States Census Bureau, 2014). It is comprised of 89.3% European American, 8.2% African American, 2.2% Hispanic American, and less than 2 % of all other races (United States Census Bureau, 2014). Twenty-one percent of the population is under the age of 18 (United States Census Bureau, 2014). Only 15.7% of individuals over the age of 25 have obtained a bachelors' degree or higher (United States Census Bureau, 2014). The median household income is $36,593, and 17.4% live below poverty level (United States Census Bureau, 2014). The

religious affiliation is comprised of 63% Southern Baptist, 13% United Methodists, 9% Church of Christ, and 15% other (City Data, 2013). A total of 65.99% of total population are affiliated with a religious congregation (City Data, 2013).

The HCSS is comprised of three outlying elementary and middle schools that include Grades K-8. E.W. Grove is the ninth grade county school, but the city schools also feed into it. Tenth, 11th, and 12th grades are all contained within Henry County High School (HCHS), which is centered in the heart of Paris, Tennessee. There are three city schools which encompass a K-2, 3-5, and 6-8 and have an estimated population of 1,700 students any given year that are not considered a part of the immediate target population for this project. The county school's population is consistently around 2,800 students and is comprised of approximately 2,300 European American students, 200 African American students, and less than 100 Hispanic Americans; whereas, the city school system is comprised of 1,300 European Americans, 400 African Americans, and less than 20 Hispanic American students (Tennessee Department of Education, 2014a). Annually, there are approximately 2,000 students on free and reduced lunch within any given year within the county schools and 1,100 students within the city school system (Tennessee Department of Education, 2014a).

Data Collection

This project includes a focus on a FLE policy change and the development of practice guidelines, implementation, and evaluation plan for the newly adopted policy that will guide the organization in the full dissemination of the MMH. Evidence collected was in the form of existing peer-reviewed literature including research studies

as well as publicly available statistics. There was no actual data collection from participants because there is no actual sample of participants within this quality improvement project. Rather, a target population was examined in which the long-term implementation of this project hopes to modify in order to reduce the number of teen pregnancies within the county. Upfront data were used to identify unmet needs and gaps in services and assisted in more effective implementation and evaluation planning.

Evidence collected included other peer county and state FLE policies, especially those that are comprehensive, evidence-based TPP programs, for the development of project teams, as well as implementation and evaluation processes entailed of policy, practice guidelines, program development, and dissemination. Other forms of evidence collected pertained to the Tennessee state laws surrounding FLE; the current and ideal dissemination processes for the MMH, county, and state statistics; and community, organizational, and state resources. Data were also collected regarding project processes to ensure that the stages for development and approval of the FLE policy, development of practice guidelines, and the development of implementation and evaluation plan for the policy and practice guidelines progressed as planned.

The project objectives were completed in a timely manner. The data collection system was used to monitor project team performance to ensure that the project stayed on track in order to achieve the set forth goals and objectives. During the policy design and approval process, practice guideline development, policy implementation and evaluation development, data collection was structured around program objectives through the development of a tracking system, including desired outcomes, required data elements,

and data sources while monitoring activities and actions until complete. At any given time stakeholders were able to monitor tasks completed, nearing completion, and what was currently in progress. This assisted in allocating new or unexpected activities that arose during the project processes and required collaborative efforts with open communication channels, planning, and monitoring of all activities through the use of logic models, charts, and timelines for monitoring program progress (Hodges & Videto, 2011; Kettner et al., 2008; W.K. Kellogg Foundation, 2004).

Data Analysis

Data analysis of this process included determining what was unique about this project and setting to determining what project strengths could be built upon to meet the unmet goals and needs and where are the gaps in services and programs were. Additional analysis centered around how the project could be modified to meet the needs, as well as if the project could effectively be translated by identifying critical policy and practice development, implementation and evaluation elements, and the contextual factors that could impact translation (Hodges & Videto, 2011; Kettner et al., 2008; W. K. Kellogg Foundation, 2004). Data analysis in this project ensured that the project teams were formed and educated, the comprehensive policy developed and adopted was based on the evidence, and that practice guidelines developed reflected the newly adopted policy as well as what the literature expresses to be an evidence-based comprehensive TPP programs. The continuous analysis of the implementation and evaluation plan development also ensured that the plans were completed in a timely manner.

In the development of an analysis strategy, it was necessary to maintain focus on the project goals, objectives, and activities. Analysis of program effectiveness centered on whether the project went according to plan. It was also necessary to assess for any possible barriers and strengths identified within the projects timeframe, as well as identify if the initial plan was successful or if there were any areas needing improvement.

Other areas of analysis focused on arising issues or problems, areas of resistance, and patterns of individuals or groups that were successful in completing the tasks on time or that may have been detrimental in achieving program results. Additional factors of analysis that were the most effective or least effective contributors to success were noted, as well as areas with the highest probability of success. This allowed data to be gathered for staff and stakeholders to be informed of program effectiveness for this project at all times. Also required were examinations of other community and collaborating organizations in order to facilitate project progress and present possible barriers that could impede or achieve the goals and objectives and assist in the development of the current or future organizational and community action plans (Cassell et al., 2005).

Human Subjects Approval Statement

This project falls under a quality improvement and assurance realm and reports the results of secondary data analysis and the descriptive processes entailed in the changing of educational policy and the development of practice guidelines, as well as guiding the project team in the development of an implementation and evaluation plan for the policy and practice guidelines. There were no data collected from participants

because there was no sample of participants included within this project. Therefore, institutional human subjects' approval was not required.

Summary

This project team recommended a FLE policy change within a rural, Southern educational institution due to the rise in teen pregnancy occurring within the setting. Individuals within the institution, as educators, have studied and used behavior and cognitive theoretical underpinnings to institute knowledge transfer and behavior change. In order to achieve or change the negative behaviors of youth, researchers have demonstrated that the current dissemination processes of the MMH needs to be expanded upon to mirror other effective evidence-based comprehensive TPP programs currently being used across the United States.

For full dissemination of the MMH to occur, a larger organizational and community initiative, stakeholders had to put forth a collaborative effort, in the form of project teams and subcommittees, aimed at changing and revising the current family life policy to a comprehensive FLE policy that aligns with comprehensive teen pregnancy prevention programs at the educational level. Committee efforts were also directed in the development of practice guidelines for the newly adopted policy and in the selection of subcommittees for the development of policy implementation and evaluation plans. The policy and practice guidelines were reviewed for content validity by organizational and community stakeholders, as well as experts in the field of policy; TPP programs; STI/HIV/AIDS prevention; and program development, implementation, and evaluation.

The practice guidelines will be used in another phase of the larger organizational and community initiative, which is developing an implementation and evaluation plan for full dissemination of the comprehensive TPP program, the MMH. Through the use of the program logic model, this project's processes were monitored strategically and progressed effectively, efficiently, and in a timely manner. The policy implementation and evaluation plans entailed managing, monitoring, and evaluating strategies that will be the stimulus in achieving the overall long-term program goals. Community and organizational effort will need to be directed at decreasing the teen pregnancy rate, increasing the condom use among the sexually active, and delaying the onset of intercourse among nonsexually active youth within Henry County, Tennessee in order to see a decrease of 10 % in 3 years, 30 % in 5 years, and 50% in 7 years, which will be measured by the Tennessee Department of Health Statistics and the CDC's Youth Risks Behavior Surveillance Survey.

The theoretical underpinning of this project was grounded in the social, cognitive, and behavior theories of change. This project includes the experience and processes entailed in FLE policy and practice guideline change, development and adoption, and the process involve in the development of implementation and evaluation plans for the adopted policy. In order to improve the learning experiences of students; strengthen the capacity of schools, teachers, and parents to help adolescent and teens manage their sexuality effectively; and to develop an understanding of the youth of this county, educators must provide medically accurate and age-appropriate sexual health education.

The logic model served as a framework to monitor project progress. Due to the time constraints of this project, and the time commitment required for the full implementation and evaluation of the TPP program, I concentrated on the first steps of the overall organizational and community initiative encompassing changing educational policy and practice guideline development and outlined the processes needed in the development of an implementation and evaluation plan for the policy to esure sustainability. Data collection was in the form of existing peer-reviewed literature including research studies and publicly available statistics. Data analysis processes revolved around project processes and whether the project progressed according to plan and was successful. This project was also instrumental in identifying project strengths and weaknesses that could be built upon to meet any unmet goals and needs, as well where gaps existed in services/programs and activities and project modification to meet those needs.

The completion of this project should guide the CSH department and organization in their efforts directed at the full implementation and evaluation plan development and full dissemination for the TPP program, the MMH. Once the MMH program is fully operational and being evaluated effectively, the teen pregnancy rates will decrease and teens who are sexually active will increase contraceptive use; those that are not sexually active will delay their sexual debut. This project was essential in identifying, completing, and developing the initial processes and components necessary for successful teen pregnancy prevention programs that demonstrate positive outcomes within Henry County, Tennessee.

Section 4: Findings, Discussion, and Implications

Introduction

The teen pregnancy rate for Henry County has been steadily increasing over the past few years for females ages 15-17 (Tennessee Department of Health, n.d.). It has risen from 14.6/1,000 in 2010 to 25.9/1,000 in 2011 to 32.0/1,000 for 2012 and is expected to further increase for 2013 due to the number of teen pregnancies being experienced within the county (Tennessee Department of Health, 2014b). Over a year ago, the CSH council set forth a TPP action plan outlining three overarching goals and 10 objectives, as shown in Appendix A. Due to the time constraints of this DNP project, the first goal and the first two objectives were selected for this project because they were believed to be instrumental steps in this process in order to achieve the other goals and objectives set forth in the CSH TPP action plan. Additionally, the first objective of building community and organizational infrastructure is actually encompassed within all of the other goals because, as each goal or objective is worked upon or achieved, the community and organizational infrastructure would be developed more extensively. The project team that was developed for this project will serve as the guiding coalition for which the community and organizational infrastructure will be built upon.

The purpose of this project was to develop an evidence-based FLE policy for adoption by the BOE. The project goal was to reduce the teen pregnancy rates for ages 15-17 in Henry County, Tennessee. The second and third goals were developed while reviewing the literature because scholars have demonstrated that, when correctly implementing comprehensive evidence-based teen pregnancy prevention programs, other

secondary outcomes have been shown. The second goal was to delay the onset of sex for nonsexually active teens and to increase the contraceptive use among sexually active youth. The outcome measurement that will be used for these goals will be the Tennessee's Department of Health Statistics and the Youth Behavior Surveillance Survey conducted annually within the state. The desired outcome is to see a reduction in the teen pregnancy rates by 10% in 3 years, 30% in 5 years, and 50% in 7 years from the start date of implementing the comprehensive evidence-based TPP program the MMH.

In order to accomplish the stated outcomes, there were several desired objectives that needed to be completed within this project's timeframe, which are shown in Appendix B. There were two primary products developed. The first product was the revised and adopted policy, which was based on a comprehensive policy termed Abstinence-Centered Plus Contraception. A collaborative, organizational, and community project team was formed and assisted in the development and adoption of the FLE policy, which is shown in Appendix E. The other primary product developed was practice guidelines, shown in Appendix F. Secondary products of completion were the policy implementation and evaluation plans shown in Appendices H and I.

This project resulted in the successful development of a comprehensive FLE policy that was adopted by the BOE in July 2014, as well as practice guidelines for the adopted policy and a policy implementation and evaluation plan to assist in the dissemination of the new policy. If the larger community and organizational initiative for MMH full dissemination is appropriately planned, implemented, and evaluated as the literature demonstrates, this project will considered the impetus that resulted in

decreasing the teen pregnancy rate, delaying the onset of sex for nonsexually active teens, and increasing the contraceptive use among sexually active youth within Henry County Tennessee.

Discussion of Project Products/Results

Primary Products of Project

There were two primary products that resulted from this project. The first was a comprehensive FLE policy based on the Abstinence-Centered Plus Contraception format shown in Appendix E. The development of this policy took place over many months with several revisions. This process started with educating organizational and community stakeholders on many occasions and discussing the issue at local organizational, council, and community meetings and settings. Educational topics consisted of the teen pregnancy issue, current FLE policy, FLE law, policy formats delineated by the state that could be developed for adoption, and what the literature demonstrated as effective programs, as well as what has been shown to demonstrate positive outcomes within communities and organizations in order to decrease the rising teen pregnancy rate.

A project team consisting of key community and organizational stakeholders was developed from these educational sessions in order to begin development on policy formation. The project team leaders reviewed policies that were from other similar serving peer communities in which their teen pregnancy rates were at one time equivalent to or higher than Henry Counties and had shown a continuous decrease over the last 5 years. The project team leaders then developed a preliminary policy, which was a

culmination of other comprehensive policies found within the state. The proposed policy was then presented to the project team, CSH council, HC health advisory council, school administrators, educators, counselors, nurses, and county administrators, such as the director of curriculum development and instruction, supervisor of instruction, and director and assistant director of schools for input and support. After much discussion, debate, and revision by the project team, team leaders and the CSH advisory council, the final policy that is shown in Appendix E was presented to the BOE for approval.

Appendix E includes the final board-approved policy in its proper format that is posted on the HCSS website (Policy On-Line Henry County Board of Education, 2014). The content is self-explanatory and encompasses family life content to be covered, as well as the actual state mandates and amendments. This was necessary in order to increase compliance among HC educators in regards to what is supposed to be taught regarding sex education in all Tennessee schools per state law. The previous policy was more broadly developed, which led to confusion.

There were several unexpected events surrounding policy development and approval. The first presented itself during one of the CSH meetings for policy development and approval. One of the local pastors and his wife came to one of the CSH meetings for policy development and change. They demanded that the policy remain abstinence-only, and after the meeting, protested the change publicly as well as on social media. This fueled the local media with front page articles titled "County School System Considers Sex Ed," which led to more debate within the "Letters to the Editor" section of the local paper. There were numerous calls to school administration and board members,

as well as citizens appearing at the public hearing prior to the BOE meeting at which the proposed FLE policy change was first introduced.

Additionally, two of the school counselors from one of the outlying county schools skirted around previous discussions regarding the need for FLE and the policy change and began to protest the change of the FLE policy at the last minute due to their religious affiliation. The two stated that, because of their Catholic religion, they did not desire to discuss contraception nor abortion. Even though one of the counselors claimed to be prochoice, she did not want to sway an individual in either direction. She stated the only way this could be accomplished would be to not discuss these topics at all. Additionally, all of the guidance counselors for the elementary and middle schools felt as if the brunt of the teen pregnancy prevention program dissemination was going to fall upon their shoulders and that nothing was being taught within the ninth-12 grades that assist in the prevention of teen pregnancy. After much debate, one stated that she supported the Abstinence-Only Policy because of her beliefs. The other counselor stated that she agreed that the community had a problem and that something needed to be done within the educational facility. Even though she would prefer the Abstinence-Only policy, she supported the comprehensive FLE policy due to community needs.

After the BOE's first reading for the FLE policy change, the local African American religious leaders contacted the director of CSH and asked to come speak at their next regional meeting. The meeting began and ended with them asking how they could be of help. They expressed to the CSH director to tell them what they needed to do to ensure that the comprehensive policy moved forward because sex education needs to

be taught in the schools. After that meeting, the CSH director and I met with a local newspaper journalist, desiring an article that would educate the community members about the teen pregnancy issue, current and proposed FLE policy, effective programs that demonstrate positive outcomes, and solutions. The article ran the following week and was well received by all.

Appendix F represents the practice guidelines document, which was the other primary product of this project. The development and approval of practice guidelines was an uneventful process. Each board member was given a copy of the three state CSH policy formats, Abstinence-Only, Abstinence-Centered, and "Abstinence-Centered Plus Contraception, which already had developed practice guidelines attached that corresponded to the Tennessee State educational standards for family lifetime wellness and health. Additionally, each of the formats built upon the previous format, so Abstinence-Centered Plus Contraception encompassed Abstinence-Centered and Abstinence-Only practice guidelines. Furthermore, once the chosen policy format was adopted, the FLE policy stated (Appendix E, Line 3) that the LEA chose to adopt the Abstinence-Centered Plus Contraception approach. Therefore, development of the practice guidelines consisted of placing the practice guidelines from all three separate documents into one, which is shown in Appendix F.

Secondary Products Developed

Policy implementation plan. There were several secondary products developed within the realm of this project. The first was the policy implementation plan seen in Appendix H, which delineates tasks that need to be performed in order to implement the

newly adopted FLE policy. The implementation plan was developed for the purpose of ensuring that the newly adopted policy would be fully implemented and all organizational and community stakeholders and educators would fully understand the policy and law surrounding FLE to pave the path for future program implementation of the MMH. The director of instruction and CSH director will be able to use this document to assign and supervise policy implementation without further planning. The steps required are listed with target completion dates. Therefore, all the directors of instruction should have to do is conduct a meeting that will assign all the responsible parties, tasks, and supervision of the project.

The policy implementation plan also included three additional steps to ensure sustainability and forward movement of full dissemination for the MMH teen pregnancy prevention program. The specifics for these tasks will be allocated and developed by the project team at a later date. The larger community initiative objectives delineated within this document allows for the project team leaders to plan ahead in their efforts for MMH dissemination. It also includes suggested timeframes for completion as well as delineation of who should be responsible for the completion of each task. This document is not considered to be all-encompassing of all the tasks that will be required to ensure that program implementation and evaluation planning are completed successfully. These objectives will have to be divided into additional activities and tasks with allocated timeframes and responsible parties listed.

Policy evaluation plan. Another secondary product of this project was the policy evaluation plan found in Appendix I. The policy evaluation plan was developed from the

bylaws set forth within the FLE policy (Appendix E) to ensure policy sustainability so that the newly adopted policy will be implemented to the full extent of every bylaw that requires action. The evaluation plan is self-explanatory and allows for policy evaluation to occur every year. The document allows for the supervisor of instruction to determine when to complete what, who is responsible for completion, as well as who will be completing each task. Additionally, the document delineates how each task will be measured

The supervisor of instruction and CSH director will be able to use this document to assign and supervise policy evaluation processes on an annual basis. The tasks are listed with target completion months instead of completion dates because policy evaluation should be completed on an annual basis. By Tennessee law, every Learning Educational Agency's FLE instructional materials have to be reapproved yearly by each district's BOE. The policy or educational material set forth in previous years may need adjustment or revision once the MMH program has been implemented and evaluated. This document allows for the director of instruction to conduct meetings with all of the responsible parties, assign tasks, assist in setting specific dates, and supervise the policy evaluation process annually.

Challenges and insights gained. Several challenges were presented during the timeframe of this project. One of the most surprising and controversial challenges was the number of educated individuals wit in the community and organization who had a difficult time separating church and state. Many felt that Abstinence-Only was the only educational method that should be taught regarding sexual health within the educational

system and publicly protested using social media and the local newspaper. Their views were that sex education should be left up to the parents of the children and not a concern of educators, even though the number of teen pregnancies experienced within the community is considered to be at epidemic proportions.

This controversy was handled with continued education of the negative consequences of teen pregnancy, the short- and long-term negative effects experienced by pregnant teens and their children, and economic costs experienced by communities and the United States. The team leaders also elicited the local newspaper to assist in educating the community. The article created a general understanding that this was an issue that the entire community was responsible for and does not lie upon the shoulders of educators or parents because "It Takes a Village to Raise a Child" to ensure that they become healthy and responsible adults. The article included a discussion of the teen pregnancy statistics; negative consequences of teen pregnancy; what researchers have demonstrated to be effective teen pregnancy prevention programs, the MMH; and the state health, wellness, and family life educational standards and laws that mandate sexual health. The newspaper author also reviewed that per law and state statistics, it is a school system's responsibility to ensure that these standards are being taught appropriately; otherwise, the state department of education can mandate processes that the school systems have no control over when the teen pregnancy rate exceeds 19.5/1,000 for females ages 15-17.

Another unanticipated challenge, as previously discussed, was the resistance experienced by school counselors at the elementary and middle school level. On

numerous occasions the need for FLE policy change, and the need for better dissemination of the MMH, was discussed with the counselors with a perceived buy-in. Except for the two Catholic counselors' inability to separate church and state, expressing that they were not wanting to discuss contraceptives because of their religious beliefs, there was no other issues conveyed until a couple of weeks prior to the board meeting. At that time, the counselors stated that they were not in favor of the change because they felt as if the brunt of program dissemination efforts would be placed upon them. They believed that none of their state standards included sex education and that the ninth through 12th grades educators and guidance counselors did nothing in regards to the prevention of teen pregnancy at the educational level.

This situation posed a problem for several reasons. Most of the sex education at the elementary and middle school level has been taught by school counselors. The project team leaders claimed that all the school counselors were in favor of the policy change. If the counselors' standards did not include sex education, they could not be held accountable and it was unknown who would assist them with disseminating the information at the elementary and middle school levels. Even though this meeting resulted in roadblocks, it was positive because these issues could be planned for and addressed in order to facilitate movement around them in order to find solutions to their concerns. This could be addressed in showing the counselors specifics regarding what the actual change would involve and allocated responsibilities. This will allow for the project teams to plan ahead when the MMH implementation plan is developed and for other means of dissemination. Using community health care workers or the county's

health educator to assist in some of the lessons might be beneficial and address their concerns.

An administrative meeting 2 days later, one of the principals at the school the two Catholic guidance counselors are employed spoke to the need of a comprehensive policy and program because sixth graders were "doing it." At that time, other principals chimed in with approval and support. This was perceived by project leaders to favor the process of defining a solution to the concerns that the counselors had expressed regarding the FLE policy change. Administrative support and creating a guiding coalition that assists in the development of a clear vision and strategy is key in the process of evidence-based policy and program change and leads to enhanced effectiveness and efficiency of projects (White & Dudley Brown, 2012).

A final challenge was presented at a professional development day set for for the implementation planning for the MMH, which is part of the larger community and organizational initiative. Administrators and the supervisor of instruction, along with the CSH director, allotted a full day for the preliminary planning of the MMH teen pregnancy prevention program. Included in this planning were organizational educators and school counselors who either already or could possibly teach subjects pertaining to family life. The CSH director and project leaders took the time to educate them about the FLE laws, newly adopted policy, and the tasks that would need to be completed in order to achieve full dissemination of the MMH. Much of this meeting consisted of counselors and educators placing blame with only a few of the health science and high school counselors working toward alternative ways and plans to disseminate the MMH fully.

Even though the entire day was unsuccessful in initiating an implementation plan and subcommittee development for respective grades, it did reveal that the upper level administration (i.e., director of schools) needed to be involved in the initial planning phase for the full dissemination and evaluation plan development for the MMH. Administration may need to delineate tasks to be completed, as well as possible appointment of committees and committee chairs in order to complete the required undertakings regarding the project's importance, urgency, and need for completion.

Even though an organizational culture that delineates a top-down approach sets up the project for failure, there is a need for all involved to recognize administrative support in order to facilitate project processes. There is also a need to ensure that all educators are equipped with the appropriate training and understanding of the project's purpose within an environment that allows all involved the ability to discuss and share problems to ensure full participation. All involved need the freedom and ability to ask why, share knowledge and information openly, and work to develop a trusting culture that facilitates change. Disagreement and conflict can present challenges, as experienced within this project, especially when there are differing goals and beliefs superimposed on the project. Open and respectful communication lines will assist in overcoming these types of challenges.

Implications

Policy

The Health Advisory Committee (HAC) and project team were central in making recommendations to the organizational and community stakeholders regarding the need

for a comprehensive FLE policy change. They were asked to develop a supporting policy aligning with comprehensive TPP programs and state FLE standards. The team was instrumental in informing key organizational and community stakeholders, as well as the BOE members, that a FLE policy change was needed and should be considered priority with the possible state=mandated processes for FLE. Committees need to be comprised of professionals who foster trust and respect and collaborate to achieve shared decision making that result in positive health outcomes. For the project, decentralization was a key component of effective leadership. Interdisciplinary committee and subcommittee development were needed to meet the challenge of developing an implementation and evaluation plan for the FLE policy and for future dissemination efforts for the MMH (Smith & Donze, 2010).

Practice

For future dissemination and evaluation efforts of the MMH, it will be necessary that the HAC and project team assist in delineating and developing subcommittees encompassing community and organizational stakeholders who will assist not only in the development of the implementation and evaluation plan for full dissemination of the MMH within the organization, but also in eliciting community efforts aimed at TPP program dissemination. It will be necessary to create a guiding coalition, develop a vision and strategy, and continuously communicate changes. Key for the project leaders will be to create and sustain a sense of urgency because these committees will need to focus on time-limited tasks in order to begin actual implementation and evaluation processes in August 2015. Clear and consistent communication and translation of

knowledge and evidence will lead to enhanced effectiveness and efficiency (Shirey, 2011; White & Dudley Brown, 2012).

Research

Although translation of the evidence-based practice has become a "buzz-word" to the day-to-day processes of health care, it has not actually become ingrained within everyday practice in a timely manner. The educational system has followed the same path in regards to policies that affect the health of the nation. Thus, changes made within the HCSS regarding policy development and adoption have never been based on scientific evidence nor grounded in scientific theory. Much like other educational systems' policy, sex education policy has been based on moral or religious beliefs and not what actually demonstrates positive outcomes for the sexual health of the nation.

This project should be instrumental in demonstrating the use of researched evidence on practice and policy outcomes. Additionally, the process of using a collaborative communicative model to develop and change educational policy at the institutional level should prove beneficial for other communities in moving their sex education policy away from one that has not demonstrated positive outcomes. The development of actual policy implementation and evaluation plans, as well as the development and use of practice guidelines that support the policy and the comprehensive TPP prevention program, should provide a foundation for future projects and policy changes to be implemented based on best practices.

Social Change

The long-term social implications resulting from decreasing the risky behaviors of adolescents and teens are hundred-fold. Researchers have demonstrated that adolescents who participate in comprehensive, evidence-based TPP programs that have demonstrated effectiveness show improvement in their risk and protective factors. These programs impact decision making, shape their attitudes regarding abstinence and frequency of sexual intercourse, influence sexual behavior, and increase safe-sex practices and sexual health knowledge (Kirby, 2001, 2007, 2008; Kirby et al., 2007; Kirby et al., 2011; Kirby & Lepore, 2007). Additionally, decreasing the negative behaviors of youth results in decreased teen pregnancy rates and unintended pregnancies, which should positively affect the social and economic cost to society (AHRQ, 2010; CDC, 2012; Hoffman & Maynard, 2008; National Campaign to Prevent Teen and Unplanned Pregnancy, 2011; Sing & Darroch, 2000).

Even though, this project does not actually implement a TPP program with demonstrated outcomes, it sets the footwork for one to be implemented and for outcomes to be evaluated that lead to social change. This program should provide guidance for community and institutional governing officials to consider comprehensive, evidence-based policies within the institutional setting that support programs. Integrating the evidence with community, population, or institutional need is key to guiding educational policies at the local, state, and national level, which should decrease the individual, social, and economic impacts currently experienced due to the negative consequences of teen pregnancy and negative health behaviors.

Strengths and Limitations

Strengths

Strengths resulting from this project are revealed in the descriptive processes of successful policy development and approval, policy implementation and evaluation plan development, and the development of a community and organizational project team. The project processes were successful in policy development and adoption, practice guideline development, and in the development of implementation and evaluation plans for the newly adopted FLE policy. The summative analysis assists in determining whether the activities performed achieved the desired goal and helps to determine whether the policy development and adoption processes successfully evolved as planned. This project assists in delineating positive and negatives outcomes pertaining to this process and what could or should have been done differently.

Sharing the factors that assisted or got in the way of achieving certain tasks within a timeframe will also allow for the identification of determinants that can be shared with other similar organizations and communities. Dissemination of this project at regional and state conferences could assist peer communities with similar policies, projects, or programs to be adopted, developed, implemented, and evaluated. Additionally, the development of a policy implementation and evaluation plan also allows for analysis of actual policy implementation and evaluation processes and can lead to further recommendations for policy and program change.

Looking ahead at the larger community initiative, this project paved the way for subcommittees to develop full implementation and evaluation plans for the

comprehensive TPP program, the MMH program. Once the program has been fully implemented, there will be numerous opportunities for the HCSS or CSH department to design and complete quantitative or qualitative research design studies that assist in determining whether the MMH program worked as intended, as well as additional opportunities to evaluate program outcome and impact on the target population.

Limitations

This project's focus was on changing a FLE policy, developing practice guidelines for the newly adopted policy, and planning for implementation and evaluation of the policy for the purpose of achieving full dissemination of a comprehensive TPP program, the MMH, which is a larger community and organizational initiative. Due to this purpose, difficulty exists in linking the project's goals and outcomes to activities that achieved policy adoption, practice guidelines development, or the development of an implementation and evaluation plan for the newly adopted policy. Therefore, it will be difficult to determine if the policy change or the other activities performed within this project directly affected any future decrease in the teen pregnancy rate, delayed the onset of sex for nonsexually active youth, and increased contraceptive use among the sexually active.

The goals set forth for this project were consistent with the long-term community and organizational initiative goals and outcomes and were not expected to be a direct result of this project, but to be achieved after the larger community initiatives are in place for some time. This project is considered a foundational or fundamental movement in what researchers have designated as components of effective programs that result in

decreasing teen pregnancy rates. Even though achieving the adoption of an FLE policy reflecting Abstinence-Centered Plus Contraception components in the rural South was monumental, it is in no way to be considered the cause that results in teen pregnancy rate decreases long term. Even after full program implementation, it will be difficult to determine if full dissemination efforts of the MMH result in decreased teen pregnancy rates due to the many facets of the larger community initiative.

Additionally, there is a 2-year delay in the release of state health statistical teen pregnancy data, which means that any correlation experience between educational effort and rate of change will almost be impossible to track due to the many components of program dissemination. Therefore, long-term continuous and close monitoring and follow-up is advised during and after program stages. Implementation processes using pre/posttests administered over topics at specified time intervals would also assist in scientifically measuring program impact on the population, program outcome, and health impact of an intervention upon knowledge, behavior, and skills. Furthermore, a comprehensive program with many components makes it difficult to determine or differentiate effective from ineffective components or to determine the level of intensity required of the participating students or the instructor. There will be a need for more complex experimental comparison studies within this population that are scientifically controlled to be conducted in the future once the MMH has been fully implemented.

Looking ahead postprogram implementation, even with close and continuous monitoring and follow-up, difficulty will exist in linking cause and effect relationships due to the individual diversity of instruction techniques. Even though the MMH modules

are scripted with detailed content to be covered within allocated timeframes, assessing how much time is devoted to topics and content, how topics are presented, and pedagogic techniques used within each individual class limits outcome measurement, which limits the project and program credibility, validity, reliability, and generalizability. Given the size and nature of the larger community and organizational initiative, a need exists for each educator to be consistently and repeatedly trained. Additional efforts are also needed to delineate dissemination and evaluation processes and reporting. Even then it will be difficult to ensure that all topics are covered per model scripts and recommendations for outcome measurement. This limitation will need to be addressed during the development phases of program planning, instructor training, and evaluation reporting to ensure consistency, credibility, validity, and reliability within future studies.

The findings of this project are not considered to be generalizable and will only be representative of the small, rural West Tennessee community in which the project was completed. Therefore, it cannot be assumed that what works for changing educational FLE policy within this community will work for other educational institutions or communities. Other educational agencies that are similar in structure and function may be able to mirror the actions and activities, but that will not guarantee the same outcomes or success. There will be a need for continuous monitoring and analysis, while making the needed adjustments as the project migrates forward in order to achieve the desired results.

Project leaders moving forward with the larger organizational and community initiative must get long-term buy-in of all stakeholders. There may be resistance to

change, especially in the introductory periods. Those who are affected the most by the change may respond more emotionally, which occurred among the school counselors and some of the community's citizens within this project's timeframe. However, keeping the communication lines open regarding the beneficial nature of the change; maintaining open but structured planning phases; addressing the reasons for resistance as they arise; and keeping key stakeholders involved to allow for resistances to be clarified, examined, and addressed will allow for progress to be accomplished and sustained. Everyone needs to feel ownership of the change, which is accomplished with active participation and communication from all involved.

There are many unanswered questions beyond the limitations discussed above that could be identified, but pregnancy prevention efforts need to extend beyond policy change and individual decisions about contraception and sexuality. The influence of family, community, and environment also must be recognized scientifically. Future projects need to revolve around engagement of all health partners, including health, education, and social services; youth support services, and the voluntary sector as well, including the provision of health services tailored for youth not only within the institution but also community-wide.

Analysis of Self

Over the past several years, this program has shaped my skills and understanding of advanced practice nursing encompassing doctoral essentials of nursing practice. I have grown in my ability to assess the impact of practice policies and procedures on meeting the health needs of populations, particularly the adolescent and teen populations,

to provide quality improvement strategies that create and sustain change at the organizational and policy level. I have noticed advancement in understanding of the principles of practice management and systems leadership while balancing nursing practice with the improvement of health outcomes. The practicum experience has continued to expand my personal knowledge and skills of the multiple issues that affect youth, including the policies that govern them. I have continued to develop my leadership skills and experience from my preceptor and through interaction and continuous dissemination of demonstrated evidence with state, community, and organizational stakeholders, shared ideas and expertise not only applicable to the project at hand but for future evidence-based projects as well.

Translation of evidence into the practicum setting has not only become central to the day-to-day processes encompassing issues that affect school health, but also within my nursing practice as well. During this field experience, I found myself using what I learned within the academic portion of this program and project to assist my preceptor in the translation of quality, safety, and performance improvement projects. I have developed the ability to access resources for good practice and generalizable evidence, including benchmarking data at the global, national, local, organizational, and individual level. In my role within the CHS department, I advised on program evidence, implementation, policy, and evaluation efforts related to teen pregnancy prevention and parenting programs, as well as other CSH programs, such as drugs and alcohol abuse prevention, obesity, nutrition, bullying, safety, and violence. Being able to sustain the ongoing assessment of the organization progress, the identification of systems' issues,

and increased knowledge advancement of facilitating organization-wide changes in practice delivery has increased my political and systems thinking skills, as well as business and financial analysis of practice quality, processes, and costs.

I have seen improvement in my aptitude to enlist individuals to get involved in change activities and transform the overall approach that their organizations are taking to enable and drive change. I improved upon my leadership effort and skills required to create capacity and capability for the change needed to transform teen pregnancy prevention efforts with the HCSS and surrounding community. I was able to engage improvement efforts of frontline clinical teams, using systems change for workforce development and management, encompassing leadership for successful planning, and enlisting service users to drive and influence change. The DNP program and practicum setting has been instrumental in my ability to analyze, identify, and plan ahead for possible roadblocks that may result in program or project failure and how to overcome barriers to change.

This practicum has increased my skills and knowledge in working with organizational and political arenas within educational institutions at the local and state level. I gained experience in the processes of determining how a sex educational policy can prohibit the provision of care, as well as analyzing how the educational policy, when prohibitive and vague, leads to negative health outcomes in the adolescent and teen population. Leadership in health policy competencies have reflected the processes included in meeting the health needs of a student population in the face of adversity. Additionally, extensive literature reviews pertaining to the numerous aspects of

comprehensive teen pregnancy programs and policies on the community, state, and national levels made it transparent the impact that practice policies and procedures have on meeting the health needs of the adolescent and teen population, as well as successfully implementing quality improvement strategies in creating and sustaining changes at the organizational policy level.

Strategies for promoting continued professional development include serving on local, regional, and state health advisory boards that govern issues related to the health of students and achieving certification from the National Council of Family Relations (NFLE) in order to teach family life education within the HCSS. Future plans for improving access to primary health care include developing a FQHC within Henry County and implementing the Vaccines For Children Program (VFC), as well as working toward the goal of providing health care to students within the organization either through a school clinic or telemedicine. I plan to actively serve as a member in the Tennessee Primary Care Association and the Rural Health Association of Tennessee. In efforts to stay engaged with research and ongoing review of the literature, I will continue to receive and review e-mails and updates related to evidence-based practice from professional organizations and foundations such as such as the Office of Adolescent Health, The Campaign to Prevent Teen and Unwanted Pregnancy, W.K. Kellogg Foundation, Annie E. Casey Foundation, Robert Wood Johnson Foundation, CDC, as and the professional organizations that I participate in.

The benefits of doctoral nursing practice programs should include the development of advanced practice competencies for practice, faculty, and leadership.

Doctoral of nursing programs should encompassing knowledge that improves nursing practice, health care delivery outcomes, and leadership skills that strengthens nursing practice and the way health care is delivered. Advanced practice competencies should include interdisciplinary interaction skills, knowledge of information systems, and evidence-based initiatives that improves the quality of care and ensures that patients are receiving care that is safe, effective, client-centered, timely, efficient, and equitable. Looking back over the last several years, I do believe that I have not only achieved the competencies of doctoral nursing practice, but also enhanced and enriched my skills and practice proficiencies of advance nursing practice.

Summary

This project and practicum experienced was a rich and varied opportunity for the synthesis and expansion of knowledge and learning through diverse collaboration with experts, not only in the field of teen pregnancy prevention and the other health issues that affect the health of students, but also with other professionals and disciplines key to the success of changing educational policy, practice guideline development, evidence-based programs, and implementation and evaluation plan development. The practicum was instrumental in developing my ability to build and assimilate knowledge for specialty practice in the realm of teen pregnancy prevention and the coordination of school health's eight interrelated components that improve student health and their capacity to learn in collaboration and support of families, communities, and schools working together to address school health priorities.

It is imperative for nurses to engage in a life-long process of learning that expresses competence in nursing practice. Nurses should be active participants in developing and maintaining professional practice that supports their career goals. This can only be achieved with continued advanced academic and educational internships that contributes to and influences factors and developments encompassing effective leadership, ethical and legal issues, political standards and practice, informing health, economics, and information technology that advances and promotes the safety and quality of patient care in order to improve the health outcomes of the communities in which advance practice nurses reside. The project and practicum setting served as a foundation for a guiding coalition between the advancement of nursing practice and the coordination of school health not only within the serving community but also with the State of Tennessee.

Section 5: Scholarly Product

Introduction

The teen pregnancy rate for Henry County, Tennessee has been steadily increasing over the past few years for ages 15-17 (Tennessee Department of Health n.d.). It has risen from 14.6/1,000 in 2010 to 25.9/1,000 in 2011 to 32.0/1,000 for 2012 and is expected to further increase for 2013 due to the number of teen pregnancies being experienced within the county (Tennessee Department of Health n.d.). In response to this increase in teen pregnancy rates, the CSH advisory council set forth a TPP action plan outlining three overarching goals and 10 objectives seen in Appendix A. Due to the time constraints of this DNP project, the first goal and the first two objectives were selected for completion because they were believed to be the fundamental steps for the larger organizational and community initiative. Additionally, the first objective of building community and organizational infrastructure is encompassed within all of the other goals because, as each goal or objective is worked upon or achieved, the community and organizational infrastructure is developed more extensively. Furthermore, the project team that was developed will serve as the founding coalition for the community and organizational infrastructure in efforts to decrease the teen pregnancy rate within the community.

The purpose of this project was to develop an evidence-based FLE policy for adoption by the BOE. The overall project goal was to reduce the teen pregnancy rates for ages 15-17 in Henry County, Tennessee. The second and third goals were developed because the scholars have demonstrated that, when correctly implementing

comprehensive evidence-based teen pregnancy prevention programs, other secondary outcomes have been shown. Subsequently, the second goal was to delay the onset of sex for nonsexually active teens and the third goal was to increase the contraceptive use among sexually active youth. The outcome measurement that will be used for these goals is the Tennessee's Department of Health Statistics and the YRBS survey conducted annually within the state. The desired long-term outcome is to see a reduction in the goals by 10% in 3 years, 30% in 5 years, and 50% in 7 years from the start date of full implementation of the comprehensive evidence-based TPP program, the MMH.

In order to accomplish the outcomes, I determined that there were several desired objectives that needed to be completed within this project's timeframe, which are shown in Appendix B. There were two primary products developed within this project's timeframe. The first was a revised and adopted policy based on a comprehensive policy format termed Abstinence-Centered Plus Contraception. A collaborative organizational and community project team assisted in the development and adoption of the FLE policy seen in Appendix E and the second primary product practice guidelines for the newly adopted policy, which is shown in Appendix F. Secondary products developed by the project team were the policy implementation and evaluation plans, which are shown in Appendix H and I.

As can be seen in Appendix B, there were two larger organizational and community initiatives set forth for this phase of the overarching CSH TPP action plan. The project team also wanted to begin the development of implementation and evaluation plans for the TPP program, the MMH, to be completed within the summer of 2015. The

MMH can begin to be disseminated into the educational curriculum starting in kindergarten through 12th grade in August of 2015. These objectives were not considered to be project objectives, but were listed in order to give direction postproject completion.

This project resulted in the successful development of a comprehensive FLE policy that was adopted by the BOE in July 2014, as well as practice guidelines for the adopted policy and a policy implementation and evaluation plan to assist in the dissemination of the new policy. If the TPP program, the MMH, is appropriately designed and evaluated as researchers have demonstrate, this project may be considered the impetus that results in decreasing the teen pregnancy rate, delaying the onset of sex for nonsexually active teens, and increasing the contraceptive use among sexually active youth within Henry County, Tennessee.

Significance

Future Practice

Teen pregnancy is a public and population health issue. The adoption of healthy behaviors are essential to adolescents and young adults because they are in developmental periods of their lives and are susceptible to environmental influences. Additionally, adolescent health behaviors are established early and are grounded in their social surroundings; this needs to be understood by all community and organizational stakeholders (Kirby et al., 2011; Kirby & Lepore, 2007). In this project, I identified activities and facilitating factors imperative to the workings of educational sexual health policy change, as well as demonstrated barriers that could impede policy development

and adoption. The findings may be used to improve efforts to decrease adolescent and teen pregnancy within the educational and community setting.

Doctorates of nursing practice are prepared to assist communities and educational institutions in the development and implementation of teen pregnancy prevention programs that assist in identifying factors and programs that impact behavior. APNs understand the need for continuous review of the literature in search of best practices; school nurses are key in understanding and developing the most effective teen pregnancy prevention strategies and translating them into educational, community, and health care practices and policies. Nurses are on the front line in their efforts to promote safe sexual practices and can join forces with parents, community organizations, and schools to focus on adolescent and teen lifetime success academically, socially, emotionally, and financially through lobbying efforts to change local, state, and national policies that effect the current and future sexual health of the N=nation's youth.

Nurses should be more persuasive to community and school leaders who prefer abstinence-only education, be bolder in initiating conversations about consequences of pregnancy and the need for safe sex practices, and lobby for educational institutions to lead their educational facilities with evidence-based practice programs that have demonstrated effectiveness. Additionally, nurses in educational institutions should mirror this project's approach in addressing other health issues within educational institutions needing to be addressed, such as obesity, violence, bullying, or drug use because those also result from negative health behaviors. This project added to the existing body of the collaborative workings and knowledge that take place within

communities and organizations and assist in clarifying processes pertaining to the education of sexual health, educational institutional policy change, and implementation and evaluation plan development for the processes of changing policy, planning, implementing, and evaluating policy processes, outcomes, and the preliminary workings necessary to achieve health outcomes.

Social Change

The individual and social impact of solving or decreasing risky sexual behavior in adolescents and teens is hundred fold. Curriculum-based sex, HIV/AIDS, STIs, and teen pregnancy prevention programs are unable to control whether the youth of Henry County engage in sexual activity or whether they use protection reliably and consistently. Teens and adolescents make their own decisions, but teens who participate in evidenced-based programs that have demonstrated effectiveness should show improvement in their risk and protective factors impacting decision making regarding sexual behavior (Kirby, 2001, 2007, 2008; Kirby et al., 2011; Kirby et al., 2007; Kirby & Lepore, 2007). It is imperative that the identification of the factors affecting behavior be identified so that the effective and successful programs are designed and implemented (Kirby et al., 2011). If the implemented programs pinpoint the factors that influence teen and adolescent behaviors, and if programs are able to alter those factors, then the program will change and impact teen behavior. Comprehensive ,curriculum-based sex education programs have an effect on behavior, internal and cognitive factors of knowledge, attitudes, skills, and intentions, as well as the external factors of access to adolescent and teen

reproductive health services (Kirby, 2001, 2007, 2008; Kirby et al., 2011; Kirby et al., 2007; Kirby & Lepore, 2007).

The developed and implemented evidence-based policy and programs should shape teen and adolescent attitudes regarding abstinence, frequency of sexual activity, premarital sex, number of sexual partners, age of first sexual intercourse, safe-sex practices, youth behavior, and sexual health knowledge pertaining to sexual physiology, psychological impact, contraceptive methods, STDs, STI, and HIV transmission and prevention. Teen-enhanced cognitive factors ought to include knowledge of sexual issues, pregnancy, HIV, and other STDs/STIs; perception of pregnancy/HIV/STD risk; personal values about sexuality and abstinence; perception of peer norms and behavior about sex; perceptions of barriers to condom use; and perceived effectiveness of condoms to prevent STD/HIV (Kirby, 2001, 2007, 2008; Kirby et al., 2011; Kirby et al., 2007; Kirby & Lepore, 2007).

Demonstrated behaviors that have led to a reduction in teen pregnancy are improved self-efficacy to refuse sexual activity; decreased number of sexual partners; increased communication with parents about sex, condoms, and contraceptives; and increased and improved condom and contraceptive use among the sexually active. Additionally, attitudes toward risky sexual behavior, use of protection, intent to obtain and use condoms, and to abstain or restrict from sexual activity have also shown to decrease risky sexual behaviors (Dunne et al., 2007; Finer & Henshaw, 2006; Gottlieb et al., 2008; Healthy People 2020, 2013; Jemmott et al., 2010; Kaplan et al., 2013; Kirby,

2001, 2007, 2008; Kirby et al., 2011; McNeely & Blanchard, 2009; Moore et al., 2013; Wang et al., 2006).

Socially, decreasing the negative behaviors of youth results in decreased teen pregnancy rates and unintended teen pregnancies, which in turn positively affects the social and economic cost to society. Health care and prenatal providers should see fewer birth defects, low birth weight infants, and behavior issues than currently experienced. Educators and school administrators should experience higher educational attainment and cognitive ability, decreased high school dropout rates resulting in increased graduation rates, and more youth attending college or receiving technical training. U.S. taxpayers should experience less cost associated with increased health care and foster care, decreased incarceration rates of youth, more intact families, fewer families living in poverty, higher tax revenue and income of young adults, lower unemployment rates, less poverty, and fewer single parent homes (AHRQ, 2010; CDC, 2011a, 2011b, 2014a; Hoffman & Maynard, 2008; National Campaign to Prevent Teen and Unplanned Pregnancy, 2014; Singh & Darroch, 2000).

Community-based, comprehensive sexual health education programs shape future knowledge and attitudes regarding sexual behaviors and result in more conservative behavior and less favorable ideals regarding premarital sex (Dunne et al., 2007; Finer & Henshaw, 2006; Gottlieb et al., 2008; Healthy People 2020, 2013; Jemmott et al., 2010; Kaplan et al., 2013; Kirby, 2001, 2007, 2008; Kirby et al., 2011; McNeely & Blanchard, 2009; Moore et al., 2012; Wang et al., 2006). This evidence should provide useful guidance for governing officials to consider adoption of such programs within their

organizations and communities because these programs permit cultural diffusion resulting in a leveling effect to liberalize sexual attitudes among youth (Wang et al., 2006). Integrating the research with population and community needs is key to guiding nursing and educational practice, as well as national, state, and local policies in all processes affecting adolescents so that issues are solved within all settings.

Evidence-Based Literature

Even though teen pregnancy rates are reaching all-time lows in the United States, there are still over 300,000 teen pregnancies occurring annually in the United States, of which 82% are unintended (Guttmacher Institute, 2012). The United States still has the highest teen birth rate in the developed world (Baird & Porter, 2011). Nearly half (47.4%) of high school students' nationally initiate sexual activity by the 12th grade (CDC, 2011c). According to the YRBS, 33.7% of students surveyed reported having had sexual intercourse with at least one person during the 3 months prior to the survey (CDC, 2011c).

For the last 4 years, Henry County's teen birth rate has exceeded the state rate as well as national benchmarks (Robert Johnson Woods Foundation, 2013). In 2009, Henry County's pregnancy rate was 31.8/1,000 for ages 10-19 and 19.5 for ages 15-19, and ranked 17 out 95 counties with the highest adolescent pregnancy rates for ages 10-19, which resulted in the approval and adoption of the MMH for the HCSS (Department of Health Policy, Planning and Assessment Division of Health Statistics, 2012; Tennessee Department of Health n.d.). That same year, the CHSI placed the county in unfavorable status when compared to peer counties and to U.S. rates for low birth weight, births to

women under 18, and infant mortality (White, non-Hispanic, neonatal, postneonatal categories) (U.S. Department of Health and Human Services, n.d.). The 2011 teen pregnancy data placed Henry County at 25.9/1,000, which was a significant rise from the 2010 rate of 14.5/1,000 (Tennessee Department of Health, n.d.). Additionally, Henry County experienced yet another significant rise for 2012 with the teen pregnancy rates soaring to 32.0/1,000 for ages 15-17 and all races (Tennessee Department of Health, n.d.).

Adolescent and teen sexual activity is associated with emotional and social environmental factors, physical health risks, and social and economic costs, not only for the mother but the child and for teen fathers as well (CDC, 2007; Dunne et al., 2007; Gottlieb et al., 2008). Society incurs significant annual cost due to teen pregnancy and childbirth, and taxpayers are estimated to pay over 11 billion dollars a year due to the negative consequences of teen pregnancy (Hoffman, 2006; Hoffman & Maynard, 2008; United States Department of Commerce, 2014). Until the last half of the previous decade, the government has primarily funded initiatives and programs that promote abstinence-only messages for their sexual health education despite the controversy over their appropriateness and scientific efficacy (Jemmott et al., 2010; Kohler et al., 2008; Marques & Ressa, 2013; Wiley, 2012). The United States did not support funding for comprehensive, evidence-based programs that use curriculum-based sex education or youth development approaches to prevent pregnancy until 2010 (Chin et al., 2012; Wiley, 2012).

Schools, communities, and organizations have been developing programs to reduce the negative behaviors of youth, particularly sexual behavior, by trying to decrease pregnancy or other undesirable effects of unprotected sex with the majority of the programs being abstinence-only. Elements of exemplary programs entail abstinence education, behavioral skill development, community outreach, contraceptive access, contraceptive education, life option enhancement, self-efficacy/self-esteem education, sexuality, and information regarding STIs and HIV/AIDs education (Chin et al., 2012; Hoyt & Broom, 2002). Effective programs have several common key attributes which include being delivered by trained instructors, age-appropriate instruction, skill-building, support of healthy behaviors, parental involvement, youth-serving organizations and health care organizations, and the development of curricula and integration of program activities for HIV/AIDs and STI prevention in schools and communities (AHRQ, 2010; CDC, 2013; Chin et al., 2012; Community Preventive Services Task Force, 2012, 2013; Kirby, 2001, 2007, 2008; Kirby et al., 2011).

Successful teen pregnancy prevention programs incorporate certain characteristics to assist in behavior modification, which leads to improving the risk and protective factors that impact decision making regarding sexual behavior. Educational programs that include the use of condoms and other forms of contraception does not increase sexual behavior, but delays the onset of sexual intercourse, reduces the number of sexual partners, sexual risks behaviors, and the number of repeat teen pregnancies, as well as decreases unprotected sexual participation and increases condom and contraceptive use (Chin et al., 2012; Community Preventive Services Task Force; 2012, 2013; Coyle et al.,

2006; DiClemente et al., 2004; DiClemente et al., 2009; Jemmott et al., 2005; Jemmott et al., 2010; Kirby, 2007, 2008; Kirby et al., 2011; Kohler et al., 2008; Lindberg & Zimet, 2012; Shrier et al., 2001; Tortolero et al., 2010; Trenholm et al., 2007).

While the Tennessee State law does set restrictions on what can and cannot be taught, it supports comprehensive sex education and expands on the need to provide medically accurate information about contraception and condoms, while informing the student that, although such methods lessen the risk of acquiring a STI/HIV/AIDs or becoming pregnant, only abstinence removes all risk (NASBE, 2013). Additionally, HCSS FLE policy, which was developed in 1999, states that "Instruction of family life education shall emphasize that abstinence from sexual relations is the only method of protection that is 100% effective" (Henry County Board of Education, n.d., http://www.boardpolicy.net/documents/detail.asp?iFile=4770&iType=4&iBoard=45). This mandate lacked essential components of evidence-based sexual health education policy that produces positive outcomes.

Scholars have stressed the need for school program and policy alignment with state and national sexuality education standards. Having national, state, and organization standard consistency assists in strengthening collaborative relationships amongst schools, youth, parents, faith communities, service providers, and local decision makers to promote youth sexual health issues and correspond community resources while ensuring that the state law and standards are implemented using evidence-based programs within the individual districts (Barbot, 2012; Colorado Department of Public Health, 2012; Constatine, 2008; Moore et al., 2013; Santelli et al., 2006; Wiley, 2012).

Key decision makers have developed sex education policies and practices comprising of a mixture of science, morality, politics, and personal opinions with science fairing grimly when practice, policies, and curriculum decisions were made in state and local legislatures and local school board meetings (Constatine, 2008; Wiley, 2012). This has led to policy chaos and compromises the sex education of the nation's youth. The majority of sex education policies result in the youth receiving information that is disjointed, inadequate, incorrect, and grounded on curricula that is ineffective "due to the morally motivated debates of the appropriateness of comprehensive sex education versus abstinence-only education" (Constatine, 2008, p. 324), which raises ethical concerns and is considered a denial of a basic human right (Constatine, 2008; Eisenberg et al., 2013; Santilli et al., 2006; Wiley, 2012).

Some educators believe that controversial subjects should be taught even if they did not actually teach them and that district policy, lack of time, financial resources, curriculum, parental, or administrative concerns are the most common barriers impacting their choices as to what they teach their students (Mpanza & Nzima, 2010). Additionally, teens have been found to have insight about teen pregnancy and expressed a need for more sexual information in schools that is directed and developed with them in mind, recognizing the most significant consequences being school disruption and decreased future success. This message from the user voice should sway community and organizational stakeholders to change the direction of dated educational policies and abstinence-only program implementation (Meaney et al., 2009; Weiss, 2012). Researchers have found parental and public support for comprehensive, evidence-based

sex education in schools, coupled with the demonstrated effectiveness of evidence-based comprehensive sex education programs (Chin et al., 2012; Community Preventive Services Task Force; 2012; Coyle et al., 2006; DiClemente et al., 2004; DiClemente et al., 2009;). Eisenberg et al., 2008; Jemmott et al., 2005; Jemmott et al., 2010; Kirby, 2007, 2008; Kirby et al., 2011; Kohler et al., 2008; Lindberg & Zimet, 2012; Shrier et al., 2001; Tortolero et al., 2010; Trenholm et al., 2007).

Parents and youth can make contributions because they are key in repairing the dysfunctional policies to armor children with the best possible sex education (Eisenberg et al., 2008). They are critical stakeholders in the health and educational policy, affecting adolescents and teens and influencing school officials and boards of education with their arguments for banning political mandates based on religious backgrounds, political orientation, or the vocal minority (Eisenberg et al., 2008). There is a need for interdisciplinary sexuality curricula development that encompasses broader sexuality education topics, allowing teachers in multiple subject areas to incorporate sexuality education into their lesson plans with rigorous evaluation processes and policies that reflect a young person's right to receive accurate health information and learn in an environment where sexuality is understood to be a normal part of adolescent development (Eisenberg et al., 2013).

When regulating the allocation of resources and the formation and adoption of equitable and evidence-based policies that reflect the health care and educational needs of youth, it is imperative that the youth and families of communities have access to resources and opportunities that ensures access to accurate and age-appropriate health

information so that the youth of this nation grow up to become healthy, successful, and responsible adults (Colorado Department of Public Health and Environment, 2012). National, state, and local policies and laws need to reflect youth as consumers of their own health care and respect their need for youth-friendly services and not deny them the right to accurate and complete health information within the educational setting.

Theoretical Underpinning

The project's theoretical framework was based on the social, cognitive, and behavior change theories that have been grounded in the educational learning and health care systems for decades. Social learning theories are effective in influencing risky behaviors and focus on social influences, changing personal values and group norms, and building social skills (Hoyt & Broom, 2002). Researchers have demonstrated that programs grounded in psychological, social, behavior, and cognitive learning theories can be used to identify the risk and protective factors that affect behavior (Kirby et al., 2011). Moreover, when the cognitive risk and protective factors are identified, activities and programs that are constructed to change those factors decrease the risky sexual behavior of adolescents and teens, resulting in a decrease in the negative physical, social, and environmental consequences of teen pregnancy (Bandura, 1977; Hacker et al., 2005; Hoyt & Broom, 2002; Kirby, 2001, 2007, 2008; Kirby et al., 2011; McEwen & Wills, 2011).

Additionally, the program logic model was used as a guiding framework for the theoretical underpinning and controlling program process as an evaluation tool. The logic model that guided the theoretical underpinning delineates characteristics, theoretical

constructs, and concepts of the theory and delineates principles and processes that lead to expected behavior changes. The logic model was also used for guiding program process (Appendix C) because it assists in the mapping out of resources, objectives, and activities that are needed to reach the short- and long-term goals, desired outcomes, and health determinants during the planning process of the project. As an evaluation tool, the logic model allowed for evaluation to occur throughout every phase of the project. It allowed for the project team to assess, evaluate, and expand upon the project as needed in order to make the necessary changes in project activities and note whether the completed activities obtained the goal. Additionally, the logic model provided outcome feedback at all times to determine whether changes were needed to meet the outcomes or if the outcomes were met (Colorado Department of Public Health, 2012; Delaware Health and Social Services Division of Public Health, 2011; Hallinan, 2010; Huton, 2007; Oregon Department of Human Services Children, Adult, and Families Division, 2009; W.K. Kellog, 2006, 2010).

The project team will continue to use the logic model throughout project implementation and evaluation planning and during actual implementation and evaluation of the MMH, the larger community and organizational initiative. This will allow for continuous remodeling and improvement monitoring of the program, as well as demonstrate change facilitation and outcome evaluation. The resources, inputs and throughputs, program development, and sustainment must lead to the desired outcomes and further validate support for continuous CHS program funding.

Approach

This project was focused on the revision of an FLE policy to a more comprehensive, evidence-based policy that supports the comprehensive teen pregnancy prevention program currently adopted. The project design for this phase was qualitative in nature with an descriptive account of the actions, activities, and processes entailed in changing educational policy at the institutional level, as well as a descriptive account and analysis of the processes involved in the development of a project team, policy, practice guidelines, expert validation content, and the implementation and evaluation plan development for the adopted policy. I accomplished these activities using the seven objectives seen in Appendix B.

The processes entailed of project team development, policy revision, practice guideline development, content validation, and the development of implementation and evaluation plans, which were monitored through the use of a program logic model that allowed organizational and community stakeholders and project leaders to understand where the project was at any given time and whether there were deviations in the plan. This allowed for adjustments to be made in a timely manner to prevent any undesirable effects on the short-term and long-term program outcomes. Having articulated objectives and activities enabled the intervention teams to see early on if the program was being put into place as planned, which could have potentially affected not only the planning stages, but future implementation and evaluation effectiveness and efficiency. If the program logic model is set up correctly, it will provide a blue print for the actual implementation

and evaluation process of the larger community organizational initiative (Hodges & Videto, 2011).

A collaborative organizational and community project team assisted in the development and adoption of the policy, practice guidelines, and development of a policy implementation and evaluation plan. These processes should set the ground work for the larger community initiative of implementation and evaluation plan development for inclusion of the MMH into the educational curriculum starting in kindergarten through 12th grade by July 2015 in order to begin the actual implementation and evaluation processes for the MMH, which are scheduled to begin sometime in the fall of 2015.

Project Team

There was a need to develop an organizational- and community-based coalition for the development of the policy and practice guidelines, as well as the development of the implementation and evaluation plans for the adopted policy. The project team will also serve as the founding coalition for the larger community initiative of developing implementation and evaluation plans in order to fully disseminate the MMH within the organization and community. Team members were chosen for their knowledge and experience and consisted of key organizational and community stakeholders, such as school nurses and counselors, educators, administrative personal, and members from the target population. Community team members consisted of key community educators, health care personal (i.e., nurses, providers, social workers) counselors, key organizations that worked with this population (i.e., Family Resource Center, Tomorrow's Hope), and parents. Also desired was a state CSH official, due to his familiarity with the teen

pregnancy issue within the county as well as his familiarity with MMH program implementation across the state.

Of special interest was the need to determine individual preference regarding which family life educational policy best supports the comprehensive sex educational curriculum, whether Abstinence-Only, Abstinence-Centered, or Abstinence-Centered Plus Contraception, in order to not impede policy development and implementation. Due to the nature of this project, it was essential to separate the project team into subcommittees and further divide into subgroups for age-specific materials not only for implementation and evaluation of the adopted policy, but also for future implementation and evaluation planning of the MMH. This was needed in order to continue momentum and move the organizational and community teen pregnancy prevention initiative processes forward.

Assembling the project team entailed planning, attending, and speaking at key community and organizational gatherings and meetings. I presented the teen pregnancy issue within the county, pregnancy statistics, current policy, evidence-based policies and programs, evidence-based literature pertaining to the issue, and adopted and proposed use of comprehensive MMH. There was a need to ensure that key organizations, coalitions, and individuals were present in order to gain support for the comprehensive Abstinence-Centered Plus Contraception FLE policy change, as well as to elicit team members to assist in moving the initiative forward. This process was measured by meeting dates, copies of agenda, and attendance roosters of key organizational and community meetings

including key stakeholders, verbal or written acknowledgement, and acceptance of project team placement.

Primary Products of Project

There were two primary products that resulted from this project. The first was a comprehensive FLE policy format based on an Abstinence-Centered Plus Contraception format shown in Appendix E. The development of this policy took place over many months with numerous revisions. This process started with educating organizational and community stakeholders on the teen pregnancy issue, current FLE policy, FLE law, policy formats delineated by the state that could be developed for adoption, and what researchers have demonstrated as effective programs.

A project team consisting of key community and organizational stakeholders was developed from these educational sessions in order to begin development on policy formation. The project team leaders developed a preliminary document, which was a culmination of other comprehensive policies found within the state serving communities in which their teen pregnancy rates were at one time equivalent or higher to Henry County's and had shown a continuous decrease over the last 5 to 7 years. The proposed policy was then presented to the project team, CSH council, HC health advisory council, school administrators, educators, counselors, nurses, and county administrators, such as the director of curriculum development and instruction, supervisor of instruction, and director and assistant director of schools for input and support. After much discussion, debate, and revision by the project team, team leaders, and the CSH advisory council, the final policy that is shown in Appendix E was presented to the BOE for approval.

Appendix E is the final board approved document in its proper format that is posted on the HCSS website (Policy On-Line Henry County Board of Education, 2014). The content is straightforward and self-explanatory. It encompasses the family life content to be covered, as well as the actual state mandates and amendments. This was thought to be necessary in order to increase compliance among the educators in regards to what is supposed to be taught regarding sex education in all Tennessee schools per state law. The previous policy was more broadly developed, which led to much confusion among the educators.

There were several unexpected events surrounding policy development and approval. The first was presented during one of the CSH meetings for policy development and approval. One of the local pastors came with his wife and began protesting the change in policy publicly using social media. This fueled the local media with front page articles titled "County School System Considers Sex Ed," which led to more debate within "Letters to the Editor" and other articles, calls to board administration and members, as well as citizens appearing at the public hearing prior to the BOE meeting at which the proposed FLE policy change was scheduled.

Additionally, two Catholic school counselors from one of the outlying county schools skirted around previous discussions regarding FLE and the need for a policy change. These two school counselors also began to protest the new curriculum due to their religious affiliation. The two stated that they do not desire to discuss contraception nor abortion, even though one was prochoice. The two counselors did not wish to sway individual decision making regarding contraception and stated this can only be

accomplished by not discussing these topics at all. Additionally, all of the guidance counselors for the elementary and middle schools felt as if the brunt of the teen pregnancy prevention program would fall upon their shoulders for dissemination and that nothing was currently be taught within the ninth-12 grades to reinforce what was taught at earlier ages.

After the first reading at the BOE meeting, the local African American religious leaders contacted the director of CSH and asked that she come speak at their next regional meeting. The meeting began and ended with them asking how they could be of help. The CSH director and I met with a local newspaper journalist for an educational article explaining the teen pregnancy issue, current and proposed FLE policy, effective programs that demonstrate positive outcomes, and solutions. The article ran the following week and was well received by the community.

Appendix F represents the practice guidelines document, which was the other primary product of this project. This proved to be an uneventful process because the board policy states (Appendix F, line 3) that the LEA has chosen to adopt the Abstinence-Centered Plus Contraception approach. Each board member was given a copy of the three state CSH policy formats: Abstinence-Only, Abstinence-Centered, and Abstinence-Centered Plus Contraception, which already had developed practice guidelines attached to them corresponding directly to the Tennessee State educational standards for family lifetime wellness and health. Additionally, each of the formats built upon the previous format so the Abstinence-Centered Plus Contraception encompassed Abstinence-Centered and Abstinence-Only guidelines, with decreasing comprehensive and

contraceptive content as the format became less comprehensive. Therefore, development of the practice guidelines consisted of placing all of the practice guidelines from all three separate documents into one, which is shown in Appendix F.

Secondary Products Developed

Policy Implementation Plan

There were several secondary products developed within the realm of this project. The policy implementation plan seen in Appendix H delineates tasks that need to be performed in order to implement the newly adopted FLE policy. The implementation plan was developed for the purpose of ensuring that the newly adopted policy would be fully implemented and that all organizational and community stakeholders and educators would fully understand the policy and law surrounding FLE to pave the way for future program implementation and evaluation of the MMH. The director of instruction and the CSH director will be able to use this document to assign and supervise policy implementation without further planning. The steps required are listed with target completion dates. Therefore, all the director of instruction should have to do is conduct a meeting with all of the responsible parties to assign tasks and supervise the project.

Additionally, the policy implementation plan also sets forth three additional steps to ensure sustainability and forward movement in direction of full dissemination for the MMH teen pregnancy prevention program. Specifics for these tasks will be allocated and developed by the project team. The larger community initiative objectives allows the project team leaders to plan ahead in their efforts for MMH dissemination and gives them suggested timeframes for completion, as well as delineates who should be responsible for

completion of each task. In no way should it be considered all-encompassing of the tasks that will be required to ensure that program implementation and evaluation planning will completed successfully.

Policy Evaluation Plan

Another secondary product of this project was the policy evaluation plan found in Appendix I. The policy evaluation plan was developed from the bylaws set forth within the FLE policy, shown in Appendix E, to ensure policy sustainability so that the newly adopted policy would be implemented to the full extent of every bylaw that requires action. The evaluation plan is self-explanatory and allows for policy evaluation to occur every year. The document allows for the supervisor of instruction to determine when to complete, who is responsible for completion, and who will be completing each task. Additionally, the document delineates how each task will be measured.

The supervisor of instruction and CSH director will be able to use this document to assign and supervise policy evaluation processes on an annual basis. The tasks are listed with target completion months instead of specific completion dates because this evaluation plan should be completed on an annual basis. By Tennessee law, every LEA's FLE instructional materials have to be reapproved yearly by each district's BOE. Either the policy or educational material set forth in previous years may need adjustment or revision once the MMH program has been implemented and evaluated. Therefore, the director of instruction should conduct a meeting with all of the responsible parties, assign tasks, assist in setting dates, and supervise the policy evaluation process.

Challenges and Insights

There were several challenges presented during the course of this project. One of the most surprising was the number of educated individuals within the community and organization who had a difficult time separating church and state. Many felt that Abstinence-Only was the only educational method that should be taught regarding sexual health within the educational system and publicly and persistently protested using social media and the local newspaper. The controversy was handled with continued education at organizational and community meetings, eliciting the local newspaper in educating the community. This created the general understanding that teen pregnancy was a community responsibility and does not just lie upon the shoulders of educators or parents because "It Takes a Village to Raise a Child" for them to become healthy and responsible adults. Educational sessions included the national and state health, sex, and family life educational standards and laws mandating sexual health, STIs, and contraceptive education; the teen pregnancy issue and negative consequences of teen pregnancy; state and local statistics; and evidence-based prevention programs and content.

Another challenge was the resistance experienced by school counselors at the elementary and middle school level. They felt as if the brunt of the FLE would be placed upon their shoulders and that none of their standards included sex education. This posed a problem for several reasons. Most of the sex education at the elementary and middle school level has been being taught by school counselors. The project team claimed that the school counselors were in favor of the policy change and if the counselor's standards did not include sex education, they could not be held accountable. Even though this

meeting resulted in roadblocks, these issues could be planned for and addressed in order to facilitate movement around them and find solutions to their concerns. Knowing this will allow the project teams to plan ahead when the implementation plan is developed for other means of dissemination, possibly using community health care workers or the county's health educator to assist in some of the lessons.

A final challenge was presented at a professional development day set forth for the implementation planning for the MMH. Administrators, the supervisor of instruction, and the CSH director allotted a full day for the preliminary planning of the MMH teen pregnancy prevention program. Included in this meeting were organizational educators and school counselors who either already taught or could teach subjects pertaining to family life. The CSH director and project leaders took the time to educate them about the FLE laws, newly adopted policy, and the tasks that will need to be completed in order to achieve full dissemination of the MMH. Much of the meeting consisted of counselors and educators placing blame with only a few of the health science and high school counselors working toward alternative ways and plans to disseminate the MMH fully. Even though the entire day was unsuccessful in initiating an implementation plan and subcommittee development for respective grades, it did reveal that administration was needed to be involved in the initial planning phase for the full dissemination and evaluation plan development for the MMH. Administration will need to delineate tasks needing to be accomplished, as well as possible appointment of committees and committee chairs in order to complete the needed undertakings regarding the projects importance and urgency.

Moving forward with the larger community and organizational initiative; the project leaders and team need to consider that an organizational culture that delineates a top-down approach typically sets up a project for failure. There is a need to ensure that all educators are equipped with the appropriate training and understanding of the project's purpose that allows all involved the ability to discuss and share problems to ensure full participation. All involved need the freedom and ability to ask why, share knowledge and information openly, and work to develop a trusting culture that facilitates change. Disagreement and conflict can present challenges, as experienced within this project, especially when there are differing goals and beliefs superimposed on the project. Open and respectful communication lines will assist in overcoming these possible challenges.

Implications

Policy

The HAC and project team were central in making recommendations to the organizational and community stakeholders regarding the need for a comprehensive FLE policy change. They were asked to develop a supporting policy aligning with comprehensive TPP programs and state FLE standards. The team was also instrumental in informing key organizational and community stakeholders, as well as the BOE members, that a FLE policy change was needed and should be considered priority with the possible state-mandated processes for FLE. Committees need to be comprised of professionals who foster trust and respect and collaborate to achieve shared decision making that results in positive health outcomes. For the project at hand, decentralization

was the key component of effective leadership. Interdisciplinary committee and subcommittee development was also fundamental in the development of implementation and evaluation plans for the newly adopted FLE policy and will be vital for the future dissemination efforts of the MMH (Smith & Donze, 2010).

Practice

For future dissemination and evaluation efforts of the MMH, it will be necessary that the HAC and project team allocate subcommittees encompassing community and organizational stakeholders that will assist not only in the development of the implementation and evaluation plan for the full dissemination of the MMH within the organization, but that will also elicit community efforts aimed at TPP program dissemination. It will be necessary to develop a vision and strategy, create a guiding coalition, and continuously communicate the needed change. The project must create and sustain a sense of urgency because these committees will need to focus on well-defined, time-limited tasks in order to begin actual implementation and evaluation processes in August of 2015. Clear and consistent communication and translation of knowledge and evidence will lead to enhanced effectiveness and efficiency.

Research

Although translation of evidence-based practice has become a buzz-word in the day-to-day processes of health care, it has not actually become ingrained within everyday practice in a timely manner. The educational system has followed the same path in regards to policies that affect the health of the nation. Thus far, changes made within the HCSS regarding policy development and adoption have never been based on scientific

evidence nor grounded in scientific theory. Much like other educational systems' policy, the sex education policy has been based on moral or religious beliefs and not what actually demonstrates positive outcomes for the sexual health of the nation.

This project should be instrumental in demonstrating the use of researched evidence on practice and policy outcomes. Additionally, the process of using a collaborative, communicative model to develop and change educational policy at the institutional level should prove beneficial for other communities in moving their sex education policy away from one that has not demonstrated positive outcomes. The development of actual policy implementation and evaluation plans, as well as the development and use of practice guidelines that support the policy and the comprehensive TPP prevention program, should provide a foundation for future projects and policy changes to be implemented based on best practices in which all process are grounded in the evidence. This project should also support the use of evidence-based management practices that are central to the day-to-day processes of aligning policy with educational practice.

Social Change

The long-term social implications resulting from decreasing the risky behaviors of adolescents and teens are hundred-fold. Researchers have demonstrated that adolescents and teens who participate in comprehensive, evidence-based TPP programs that have demonstrated effectiveness show improvement in their risk and protective factors impacting decision making, shaping their attitudes regarding abstinence, frequency of sexual intercourse, sexual behavior and increase safe-sex practices, and sexual health

knowledge (Kirby, 2001, 2007, 2008; Kirby et al., 2007; Kirby et al., 2011; Kirby & Lepore, 2007). Additionally, socially decreasing the negative behaviors of youth results in decreasing teen pregnancy rates and unintended pregnancies, which should positively affect the social and economic cost to society (AHRQ, 2010; CDC, 2011b, 2014a; Hoffman & Maynard, 2008; National Campaign to Prevent Teen and Unplanned Pregnancy, 2011; Sing & Darroch, 2000).

Even though this project does not actually implement a TPP program with demonstrated outcomes, it sets forth the framework for one to be implemented and for outcomes to be evaluated that demonstrates social change. This program should provide useful guidance for community and institutional governing officials to consider comprehensive, evidence-based policies within the institutional setting that support programs. Integrating the research with community, population, or institutional need is key to guiding educational policies at the local, state, and national level, which should subsequently decrease the individual, social, and economic impact currently experienced due to the negative consequences of teen pregnancy and negative health behaviors.

Strengths

Strengths resulting from this project are revealed in the descriptive processes of successful policy development and approval, policy implementation and evaluation plan development, and the development of a community and organizational project team. The project processes were successful in policy development and adoption, practice guideline development, and in the development of implementation and evaluation plans for the newly adopted FLE policy. The summative analysis assists in determining whether the

activities performed achieved the desired goal and helps to determine whether the policy development and adoption processes successfully evolved as planned. This project assists in delineating positive and negatives outcomes pertaining to this process and what could or should have been done differently.

Sharing the factors that assisted or got in the way of achieving certain tasks within a timeframe will also allow for the identification of determinants that can be shared with other similar organizations and communities. Dissemination of this project at regional and state conferences could assist peer communities with similar policies, projects, or programs to be adopted, developed, implemented, and evaluated. Additionally, the development of a policy implementation and evaluation plan also allows for analysis of actual policy implementation and evaluation processes and can lead to further recommendations for policy and program change.

Looking ahead at the larger community initiative, this project paved the way for subcommittees to develop full implementation and evaluation plans for the comprehensive TPP program, the MMH program. Once the program has been fully implemented, there will be numerous opportunities for the HCSS or CSH department to design and complete quantitative or qualitative research design studies that assist in determining whether the MMH program worked as intended, as well as additional opportunities to evaluate program outcome and impact on the target population.

Limitations

This project's focus was on changing a FLE policy, developing practice guidelines for the newly adopted policy, and planning for implementation and evaluation

of the policy for the purpose of achieving full dissemination of a comprehensive TPP program, the MMH, which is a larger community and organizational initiative. Due to this purpose, difficulty exists in linking the project's goals and outcomes to activities that achieved policy adoption, practice guidelines development, or the development of an implementation and evaluation plan for the newly adopted policy. Therefore, it will be difficult to determine if the policy change or the other activities performed within this project directly affected any future decrease in the teen pregnancy rate, delayed the onset of sex for nonsexually active youth, and increased contraceptive use among the sexually active.

The goals set forth for this project were consistent with the long-term community and organizational initiative goals and outcomes and were not expected to be a direct result of this project, but to be achieved after the larger community initiatives are in place for some time. This project is considered a foundational or fundamental movement in what researchers have designated as components of effective programs that result in decreasing teen pregnancy rates. Even though achieving the adoption of an FLE policy reflecting Abstinence-Centered Plus Contraception components in the rural South was monumental, it is in no way to be considered the cause that results in teen pregnancy rate decreases long term. Even after full program implementation, it will be difficult to determine if full dissemination efforts of the MMH result in decreased teen pregnancy rates due to the many facets of the larger community initiative.

Additionally, there is a 2-year delay in the release of state health statistical teen pregnancy data, which means that any correlation experience between educational effort

and rate of change will almost be impossible to track due to the many components of program dissemination. Therefore, long-term continuous and close monitoring and follow-up is advised during and after program stages. Implementation processes using pre/posttests administered over topics at specified time intervals would also assist in scientifically measuring program impact on the population, program outcome, and health impact of an intervention upon knowledge, behavior, and skills. Furthermore, a comprehensive program with many components makes it difficult to determine or differentiate effective from ineffective components or to determine the level of intensity required of the participating students or the instructor. There will be a need for more complex experimental comparison studies within this population that are scientifically controlled to be conducted in the future once the MMH has been fully implemented.

Looking ahead postprogram implementation, even with close and continuous monitoring and follow-up, difficulty will exist in linking cause and effect relationships due to the individual diversity of instruction techniques. Even though the MMH modules are scripted with detailed content to be covered within allocated timeframes, assessing how much time is devoted to topics and content, how topics are presented, and pedagogic techniques used within each individual class limits outcome measurement, which limits the project and program credibility, validity, reliability, and generalizability. Given the size and nature of the larger community and organizational initiative, a need exists for each educator to be consistently and repeatedly trained. Additional efforts are also needed to delineate dissemination and evaluation processes and reporting. Even then it will be difficult to ensure that all topics are covered per model scripts and

recommendations for outcome measurement. This limitation will need to be addressed during the development phases of program planning, instructor training, and evaluation reporting to ensure consistency, credibility, validity, and reliability within future studies.

The findings of this project are not considered to be generalizable and will only be representative of the small, rural West Tennessee community in which the project was completed. Therefore, it cannot be assumed that what works for changing educational FLE policy within this community will work for other educational institutions or communities. Other educational agencies that are similar in structure and function may be able to mirror the actions and activities, but that will not guarantee the same outcomes or success. There will be a need for continuous monitoring and analysis, while making the needed adjustments as the project migrates forward in order to achieve the desired results.

Project leaders moving forward with the larger organizational and community initiative must get long-term buy-in of all stakeholders. There may be resistance to change, especially in the introductory periods. Those who are affected the most by the change may respond more emotionally, which occurred among the school counselors and some of the community's citizens within this project's timeframe. However, keeping the communication lines open regarding the beneficial nature of the change; maintaining open but structured planning phases; addressing the reasons for resistance as they arise; and keeping key stakeholders involved to allow for resistances to be clarified, examined, and addressed will allow for progress to be accomplished and sustained. Everyone needs

to feel ownership of the change, which is accomplished with active participation and communication from all involved.

There are many unanswered questions beyond the limitations discussed above that could be identified, but pregnancy prevention efforts need to extend beyond policy change and individual decisions about contraception and sexuality. The influence of family, community, and environment also must be recognized scientifically. Future projects need to revolve around engagement of all health partners, including health, education, and social services; youth support services, and the voluntary sector as well, including the provision of health services tailored for youth not only within the institution but also community-wide.

Summary

The practicum and project revealed was a rich opportunity for the synthesis and expansion of knowledge and learning through diverse collaboration with experts, not only in the field of teen pregnancy prevention and the other health issues that affect the health of students, but also with other professionals and disciplines key to the success of changing educational policy, practice guideline development, evidence-based programs, and implementation and evaluation plan development. The practicum was instrumental in developing the ability to build and assimilate knowledge for specialty practice in the realm of teen pregnancy prevention and the coordination of school health's eight interrelated components that improve student health and their capacity to learn in collaboration and support of families, communities, and schools working together to address school health priorities.

It is imperative for nurses to engage in a life-long process of learning that expresses competence in nursing practice. Nurses should be active participants in developing and maintaining professional practice that supports their career goals. This can only be achieved with continued advanced academic and educational internships that contributes to and influences factors and developments encompassing effective leadership, ethical and legal issues, political standards and practice, health, economics, and information technology that advances and promotes the safety and quality of patient care in order to improve the health outcomes of the communities in which APNs reside. The project and practicum setting served as a foundation for a guiding coalition between the advancement of nursing practice and the coordination of school health not only within the serving community but also with the State of Tennessee.

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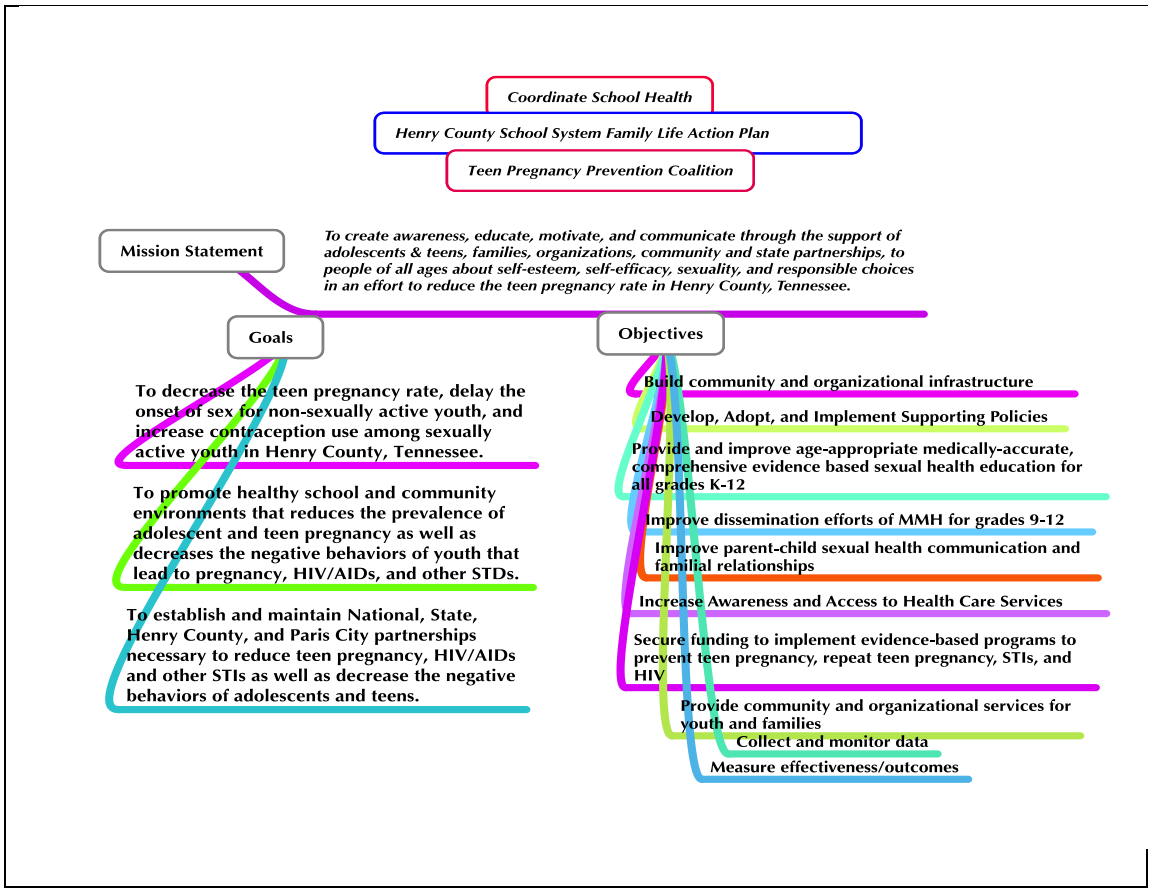
Appendix A: CSH-HCSS FLE Action Plan



Appendix B: Project Objectives

Project Objectives
1. Assemble a community and organizational stakeholder project team
2. Guide project team in a review of the literature and other available evidence.
3. Develop new comprehensive FLE policy and practice guidelines.
4. Validate policy and practice guidelines from experts in the field.
5. Obtain Board approval of new FLE policy and practice guidelines.
6. Develop implementation plan for newly adopted policy.
7. Develop evaluation plan for newly adopted policy.
Larger Organizational & Community Initiatives:
8. Develop implementation plan for the MMH, a comprehensive TPP program.
9. Develop evaluation plan for MMH, a comprehensive TPP program.
10. Actual Implementation and Evaluation of MMH.

Appendix C: HC TPP Overall Logic Model

Henry County Teen Pregnancy Prevention Action Coalition
Overall Action Plan
Logic Model

Inputs	Objectives	Determinants/Outcomes/Health Impacts		
		Short Term 1-2 years	Middle Term 3-5 years	Long Term 5+ years
Youth HCSS Educators Guidance Counselors Nurses Local Healthcare Providers Community Organizations & Businesses HCHD Coordinate School Health Advisory Council Henry County Health Advisory Council HC Women's Health Advisory Council Churches Families First/UTM Family Resource Center State & Local Government Officials State Laws & Statutes related to	Build community and organizational infrastructure Develop, Adopt, and Implement Supporting Policies Provide and improve age-appropriate medically-accurate, comprehensive evidence based sexual health education for all grades K-12 Improve dissemination and evaluation efforts of MMH for grades 9-12 Improve parent-child sexual health communication and familial relationships Increase Awareness and Access to Health Care Services Secure funding to implement evidence-based programs throughout community to prevent teen pregnancy, repeat teen pregnancy, STIs, and HIV Provide increased health services for youth and families. Collect and monitor data Measure effectiveness/outcomes	New State BOE Abstinence Centered/Based Plus Contraception Format is adopted for the FLE/Wellness/Health Policy for HCSS HCSS, parents, educators, community members and policymakers show increased knowledge of and support for a positive approach to youth sexual health, youth development principles, access to sexual health services and comprehensive sexuality education. HCSS and CSH show increased capacity to provide comprehensive, developmentally appropriate sexual health education and services in environments that support their needs. HCSS demonstrates authentic engagement to ensure ongoing youth contribution to decision-making and strengthen young people's organizational and community connections. HCSS educators, youth and families begin to demonstrate skills and confidence communicating about sexual health.	Organizational (HCSS) public and private resources sustain and increase infrastructure to provide family and community support for youth development, sexual health services and comprehensive sexuality education. Evidence-based policies and programs are consistently reviewed, sustained and evaluated within the HCSS and community. Increased youth and parental participation in comprehensive sexual health education and services increases. Increased youth feel respected and supported with regard to sexual health. More parents feel comfortable with the sex education taught within the HCSS Increase in accurate data drive decision-making, policies and services at organizational and local levels.	More youth use accurate information and well-developed skills to make thoughtful choices about relationships and sexual health. Rates of unintended teen pregnancy and birth rate are reduced in Henry County Rates of sexually transmitted infection/HIV/AIDS are reduced in HC. Non-consensual sexual behaviors are reduced. More pregnant teens and Teen moms remain in school and obtain a high school diploma More pregnant teens, teen moms and dads attend college or receive post secondary training More pregnant teens, teen moms and dads achieve their career goals Decrease in the negative effects of teen pregnancy is seen with teen moms, children of teen moms, and teen dads within Henry County.

health, education, and minor's rights State BOE regulatory guidelines CSH developed FLE Formats Community Members, Families, & Parents. National, State, and County Surveys and Data Resources. CSH officials TPP State Experts CSH Directors and from other districts Other State TPP Initiatives. Evidence Based Literature.		Data collection tools are improved implemented and utilized uniformly, ensuring inclusion of all populations. Monitoring and evaluation are used to improve service delivery and outcomes.		

Appendix D: Grant Funding Document

Coordinated School Health Teen Pregnancy Prevention Action Plan
Henry County School System
Coordinated School Health Grant Funding
Stephanie Winders, CSH Director

Mission
To create awareness, educate, motivate, and communicate through the support of adolescents & teens, families, organizations, community and state partnerships, to people of all ages about self-esteem, self-efficacy, sexuality, and responsible choices in an effort to reduce the teen pregnancy rate in Henry County, Tennessee.

Overall Long-term goals/Health Determinants of Behavior

- By 2017, Reduce the teen pregnancy rate (all ages, all races) in Henry County by 10% by 2017 as measured by Department of Health State Teen pregnancy rates
- By 2017, delay the onset of sex for all ages non-sexually active youth by 10% as measured by (YRBS or other county specific survey/MMH pre/post)
- By 2017, increase contraception use among sexually active youth for all ages by 10% by 2017 as measured by (YRBS or other county specific survey/MMH pre/post)

Medium to Short Term Overall Program Goals

- To work toward decreasing the teen pregnancy rate, delay the onset of sex for non-sexually active youth, and increase contraception use among sexually active youth of adolescents and teens in Henry County, Tennessee.
- To promote healthy school and community environments, that reduce the prevalence of adolescent and teen pregnancy, repeat teen pregnancy, as well as decrease the negative behaviors of our youth.
- To establish and maintain state and local partnerships necessary to reduce the teen pregnancy rate and join in the efforts to remodel disseminate and evaluate the Michigan Model for Health's Teen Pregnancy Prevention Model for grades K-12.

TPP ACTION PLAN FOR YEAR 2014-2015-CSH Grant Funding

Overall Goal: By 2017, Decrease the teen pregnancy rate, delay the onset of sex in non-sexually active youth and increase the contraceptive use in the sexually active youth of Henry County by 10% by 2017 as measured by the Department of Health State Teen pregnancy rates and the YRBS or other county specific survey/MMH pre/post testing.

Objective 1: By August 15th, 2014 the current Family Life Education Policy will be revised and board approved to reflect a comprehensive FLE policy termed "Abstinence Centered Plus Contraception".

Activities:

By June 1st 2014, the CSH Director will provide the Abstinence Centered Plus Contraceptive Policy and other supporting documents one week prior to the BOE members for review prior to June BOE meeting.

By June 30th 2014, the CSH Director will have presented the Abstinence-Centered Plus Contraceptive Policy at the June BOE meeting for replacement of the current FLE Policy.

By July 30th 2014, the CSH Director will have presented Abstinence-Centered Plus Contraceptive Policy at the July BOE meeting for the second read of proposed policy adoption.

By July 30th, the BOE will have voted and adopted the Abstinence-Centered Plus Contraceptive Policy for the HCSS.

As measured by:
Meeting minutes and approved board policy posted on County's website.

Objective 2: By December 15th, 2014 the implementation plan and evaluation plan for the Abstinence-Centered Plus Contraception policy will be developed.

Activities:

By October 30th, 2014 the Supervisor of Instruction and CSH Director **will have completed an informational and educational meeting** with organizational and community stakeholders pertaining to FLE laws and newly adopted policy.

By October 30th, 2014, the Supervisor of Instruction and CSH Director **will have developed subcommittees** for the development of a policy implementation and evaluation plan.

By November 30th, 2014 the subcommittees **will have completed the policy implementation and evaluation plans** and given to the Supervisor of instruction and CSH Director for review.

As Measured by:
Professional Development Day schedule and agenda, meeting agenda, attendance, and final policy implementation and evaluation plan documents.

Objective 3: By August 30th, 2015 there will be improved dissemination and evaluation efforts in place for the Michigan Model for Health for grades K-12.

Activities:

By May 30th 2015, the subcommittees **will have completed the implementation plan for improving dissemination and evaluation efforts and program monitoring** for the fidelity of the Michigan Model for Health in grades K-12.

By July 2015, all family life educators **will have been trained on program monitoring, implementation, and evaluation efforts** for the Michigan Model for Health.

By September 2015, FLE **will have begun the actual implementation and evaluation plan** for the Michigan Model for Health for grades K-12.

As Measured by:
Meeting minutes, agenda, and attendance, final implementation, evaluation, and program monitoring plan documents, class syllabus, program agendas, and monitoring documents.

Objective 4: By May 2015 HCSS and efforts for CSH Department will have improved by setting forth the delineated processes that working toward decreasing the repeat teen pregnancy rate through the utilization of organizational and community strategies, resources and services that support pregnant and parenting teens.

Activities:

By January 2015, HCSS and efforts of Coordinate School Health will have **documented the established local partnerships, developed a referral pathway/flowchart/ protocol, and developed confidential identification system of expectant and parenting teens** that will direct community, organizational and administrative efforts to respond to the physical, psychosocial, emotional, and educational and concrete needs of pregnant and parenting teens.

By March 2015, HCSS and efforts of the Coordinated School Health will have **informed relevant personnel to be knowledgeable in the appropriate referral protocol** that will guide educators, guidance counselors, and administrative personnel and community members to assist in making the appropriate referral processes for expectant and parenting teens

By May 2015, HCSS and efforts of the Coordinated School Health will have developed a teen **resource tracking system** that delineates which expecting and parenting teens are utilizing which organizational and community services (i.e. FRC, Health Start, HUGS,) as well as the graduation rate of expecting and teen parents. (i.e. MAPS, GED, Traditional Graduation Diploma).

As Measured by
Meeting minutes, agenda, and attendance sheets, final flowchart linked within the HCHS Planet HS website accessible for all stakeholder, stakeholder verbalization of knowledge of pathway/flowchart and location, quarterly reporting documents for community and organizational program utilization documents.

Appendix E: Family Life Education Policy

Henry County Board of Education

Monitoring:	Descriptor Term:	Descriptor Code:	Issued Date:
Review: Annually, in September	**Family Life Education Policy**	**4.2013**	**07/17/14**
		Rescinds:	Issued:

Boards of education in counties in which the pregnancy rates exceed 19.5 pregnancies per 1,000 females ages fifteen (15) through seventeen (17) shall devise, adopt and implement a program of family life education according to the guidelines established by the State Board of Education. [1]

As required by Tennessee Code Annotated (TCA) 49-6-1301, Family Life Education (FLE) shall be taught as appropriate, adapted to the age and grade level of students, in grades K-12. FLE is a comprehensive education program which promotes and encourages abstinence. The program shall also focus on providing students with knowledge regarding the male and female reproductive systems, pregnancy, HIV and other sexually transmitted infections/diseases (STIs/STDs), healthy and unhealthy relationships, self-esteem, (and contraception as a means to protect against unwanted pregnancy and STIs/STDs). Approved courses can only be taught by qualified instructors as determined by the local education agency (LEA). School nurses are bound by the same standards in their interactions with students.

This LEA has chosen to adopt the Abstinence Centered Plus Contraception approach. The supervisors of instruction shall be responsible for the implementation and oversight of FLE in the Henry County Schools.

While abstinence is the focus of the FLE units, contraception may also be taught in grades 7-12. TCA 49-6-1304 prohibits the distribution of contraceptive methods on school property. Presenters shall follow the Tennessee Health and Lifetime Wellness Standards and comply with TCA and LEA policy. Speakers are allowed to educate students about where to obtain contraception. Refer to TCA 49-6-1304 for specifics on what can and cannot be taught in Tennessee schools.

Coordinated school health, science teacher, school counselor and/or principal can coordinate with approved community resource agencies, including school nurses, to deliver FLE information in grades 7-12 and guest presenters shall follow the Tennessee Health Education Standards and comply with TCA and LEA policy when teaching FLE. Acceptable guest agencies/speakers must be approved by the respective school principal.

In grades 9-12, FLE shall be taught as part of the lifetime wellness course, and may also be taught by health science and family/consumer science teachers. Teachers shall follow the Tennessee Lifetime Wellness standards or course State standards and comply with TCA and LEA policy when teaching FLE.

Tennessee law requires that HIV/AIDS Prevention Education be taught at every grade level K-12.

Prior to implementing the family life education curriculum, the Board shall conduct at least one (1) public hearing at which the plan will be explained and parents and community members shall be given the opportunity to express their opinions. Parents and guardians shall be provided a convenient opportunity to preview all materials to be used in teaching FLE units at least thirty days prior to the instruction. A parent or guardian who wishes to excuse their child from any or all portions of the FLE units shall notify the principal in writing. Excused students shall be allowed to complete alternate health or wellness-related assignments without penalty, as long as assignments are completed in the designated time allotted. [1]

Pregnancy options may be discuss upon request with emphasis on early prenatal care.

[1]TCA 49-6-1302

Legal References

1.

Cross References

Appendix F: Practice Guidelines

Tennessee State Definition **"Abstinence-Centered Plus Contraception"**	ABSTINENCE CENTERED: "Abstinence-based "or" abstinence-centered" means an approach that promotes sexual risk avoidance, or primary prevention, and teaches vital life skills that empower youth to identify healthy and unhealthy relationships, accurately understand sexually transmitted diseases and contraception, set goals, make healthy life decisions, and build character
Educationally Relevant Components	Promotes abstinence from sex. Cites STDs/HIV as reasons to refrain from sexual activity Teaches that bearing children out-of-wedlock is likely to have harmful consequences for the child, the child's parents, and society Teaches abstinence as the best method (way) for avoiding pregnancy and STI's/ STD's Information on Interpersonal & Communication Skills Covers information related to non-coital (sexual activity that does not include vaginal-penile penetration) sex Discusses adolescents values, goals, and opinions related to sex Covers information on sexual development (including: affection, intimacy, body image, gender roles) Teaches abstinence as the best method for avoiding pregnancy and STI's/ STD's Information on Interpersonal & Communication Skills Covers information related to non-coital (sexual activity the does not include vaginal-penile penetration) sex. Discusses adolescents values, goals, and opinions related to sex Covers information on sexual development (including: affection, intimacy, body image, gender roles) Does teach about contraception and condom use (Discussions, Visuals, Demonstrations are to be determined by LEA)
Anatomy & Physiology	Medically accurate information regarding Anatomy & Physiology of Human Reproductive System (including: fetus development) [Health Standard Grades 6-8: Standards 7.1, 7.2] [Lifetime Wellness Standards: Standards 6.4, 6.5] Personal Hygiene [Health Standards Grades: 6-8: Standards 7.1, 7.2] [Lifetime Wellness Standards: Standards 6.3,6.2,6.4,6.5] Describe the differences between the male and female reproductive systems [Health

	Standards Grades: 6-8: Standards 7.1, 7.2] [Lifetime Wellness Standard: Standards 7.1,7.2] Education on the role of hormones in the body [Health Standards Grades: 6-8: Standards 7.1,7.2] [Lifetime Wellness Standards: Standards 6.4, 6.5]
Puberty & Adolescent Development	Puberty (Physical, Social, and Emotional Changes) [Health Standards Grades 6-8: Standards 6.2, 7.1, 7.2] [Lifetime Wellness Standards: Standards 6.4,6.2,6.5] How puberty prepares the body to reproduce [Health Standards Grades: 6-8: Standards 7.1,7.2] [Lifetime Wellness Standards: Standards 6.4, 6.5]
Identity	Body Image [Health Standards Grades: Standards 6-8: 7.1, 7.2] [Lifetime Wellness Standard: Standard 6.3] Family Structure [Health Standards Grades: 6-8: Standards 6.1,6.2,6.3] [Lifetime Wellness Standards: Standards 6.1,6.2,6.13] Differences and similarities in how boys and girls are expected to act [Health Standards Grades: Standards 6-8: 6.2] [Lifetime Wellness Standards: Standards 7.1,7.2]
Pregnancy & Reproduction	How puberty prepares the body to reproduce [Health Standards Grades: 6-8: Standards 6.2,7.1,7.2] [Lifetime Wellness Standards: Standards 6.4, 6.5] Describe the process of human reproduction [Health Standards Grades: 6-8: Standard 7.1] [Lifetime Wellness Standard: Standard 6.4] Describe the differences between the male and female reproductive systems [Health Standards Grades: 6-8: Standards 7.1,7.2] [Lifetime Wellness Standard: Standard 6.4] Signs and symptoms of pregnancy and parental practices that contribute to healthy pregnancies [Lifetime Wellness Standards: Standards 6.4, 6.5] Define abstinence as it relates to pregnancy prevention [Health Standards Grades: 6-8: Standards 7.1,7.2] [Lifetime Wellness Standards: Standards 6.4, 6.6] Define sexual intercourse and its relationship to human reproduction [Lifetime Wellness Standards: Standards 6.4, 6.5, 6.6, 6.9] Explain the health benefits, risk, and effectiveness rates of various methods of contraception, including abstinence and condoms [Lifetime Wellness Standard: Standards 6.4, 6.5, 6.6, 6.8, 6.9] Identify medically accurate resources about pregnancy and prevention and reproductive health care [Lifetime Wellness Standards: Standards 6.1, 6.4, 6.5, 6.9] Describe the steps to using a condom correctly [Lifetime Wellness Standard: Standard 6.9]

	Identify medically accurate information about emergency contraception and its mechanism of action [Lifetime Wellness Standards: Standards 6.4, 6.5, 6.12]
Sexually Transmitted Diseases & HIV	HIV & AIDS Education (Disease & Transmission) [Health Standards Grades: Standards 6-8: 7.3] [Lifetime Wellness Standards: Standards 6.8, 6.6] Common symptoms of and treatments of STDs and HIV [Health Standard Grades: Standards 6-8: 7.3] [Lifetime Wellness Standards: Standards 6.8, 6.5] Identify accurate and credible sources for information about sexual health [Lifetime Wellness Standards: Standards 6.1, 6.5] Compare and contrast behaviors including abstinence to determine the potential risk of STD / HIV transmission from each [Health Standard Grades: Standards 6-8: 7.3] [Lifetime Wellness Standards: Standards 6.6, 6.7, 6.8] Define HIV and identify some age appropriate methods of transmission as well as ways to prevent transmission [Health Standard Grades 6-8: Standards 7.3][Lifetime Wellness Standards: Standards 6.4, 6.5, 6.6, 6.7, 6.8, 6.9] Identify accurate and credible sources for information about sexual health [Lifetime Wellness Standards 6.1, 6.5] Ways to access local STD & HIV testing and treatment [Lifetime Wellness Standards 6.1, 6.8, 6.5] Develop a plan to eliminate or reduce risk for STDs, including HIV [Health Standards Grades: 6-8: Standard 7.2,7.3] [Lifetime Wellness Standards: Standards 6.6, 6.7, 6.9] Compare and contrast behaviors including abstinence to determine the potential risk of STD / HIV transmission from each [Health Standards Grades: 6-8: Standard 7.3] [Lifetime Wellness Standards: Standards 6.6, 6.7, 6.8] Explore the laws related to sexual health care services, including STD and HIV testing and treatment [Lifetime Wellness Standards: 6.2, 6.9]
Personal Safety	Dating Violence [Health Standards Grades 6-8: Standard 7.1,7.3] [Lifetime Wellness Standards: Standards 6.1, 6.10] Media Influences (Societal, Cultural, Familial, Environmental) [Health Standards Grades 6-8: Standard 6.2] [Lifetime Wellness Standards: Standard 6.2,6.3] Trusted Adults [Health Standards Grades 6-8: Standards 6.1,6.3] [Lifetime Wellness Standard: 6.1] Inappropriate touch [Health Standards Grades 6-8: Standards 7.2,7.3] [Lifetime Wellness Standard: Standard 6.1, 6.7] Alcohol & Drug use on decision making [Health Standards Grades 6-8: Standards

	6.1, 6.2,7.3] [Lifetime Wellness Standards: Standards 6.1,6.2,6.7,6.10] How does media, society and culture influence the ways which students act [Health Standards Grades 6-8: Standards 6.1, 6.2,7.3] [Lifetime Wellness Standard: Standards 6.2,6.3] Define sexual consent and explain it implications for sexual decision making [Health Standard Grades 6-8: Standard 7.3][Lifetime Wellness Standards: Standards 6.7, 6.10] Discuss laws related to bullying, sexual harassment, sexual abuse, sexual assault, incest, rape, and dating violence [Health Standard Grades 6-8: Standards 7.2,7.3] [Lifetime Wellness Standards: Standards 6.2,6.10] Discussion of threats or coercion is wrong in relationships [Health Standard Grades 6-8: Standards 7.2,7.3] [Lifetime Wellness Standards: Standards 6.1, 6.7] Explain why a person who has been raped is not at fault [Lifetime Wellness Standards: Standards 6.1, 6.10] Analyze the impact of alcohol and other drugs on safer sexual decision making and sexual behaviors [Lifetime Wellness Standards: 6.7, 6.10]
Healthy Relationships	Sexual Harassment [Health Standard Grades: Standards 6-8: 7.2] [Lifetime Wellness Standards: Standards 6.1, 6.10] Refusal Skills [Health Standard Grades 6-8: Standards 7.2,7.3] [Lifetime Wellness Standards: Standards 6.7, 6.6] 2 Communication Skills [Health Standard Grades 6-8: Standards 7.2,7.3] [Lifetime Wellness Standard: Standards 6.3,6.7,6.1] Characteristics of Friendship [Health Standards Grades 6-8: Standard 6.2] [Lifetime Wellness Standard: Standard 6.1] Peer pressure [Health Standards Grades 6-8: Standard 6.2] [Lifetime Wellness Standards: Standards 6.1,6.2,6.3,6.7.6.10] Internet Safety and Social Media [Health Standards Grades 6-8: Standard 6.2] [Lifetime Wellness Standards: Standard 6.1,6.2,6.7] Decision making skills [Health Standards Grades 6-8: Standard 6.2] [Lifetime Wellness Standards: Standards 6.1,6.7,6.11] Peer influences on relationships [Health Standard Grades 6-8: Standard 7.2] [Lifetime Wellness Standards: Standards 6.1, 6.2]

	Characteristics of healthy and unhealthy relationships [Health Standard Grades 6-8: Standard 7.3] [Lifetime Wellness Standards: Standard 6.1, 6.7, 6.10] Power differences including: age, status, position within a relationship [Health Standard Grades 6-8: Standards 7.1,7.3] [Lifetime Wellness Standards: Standard 6.1, 6.2,6.3] Friendships versus Romantic Relationships [Health Standard Grades 6-8: Standard 7.1,7.2] [Lifetime Wellness Standards: Standards 6.1, 6.3] Respect of personal boundaries [Health Standard Grades 6-8: Standards 7.1,7.2] [Lifetime Wellness Standards: Standards 6.1,6.2,6.3,6.7,6.10] Internal and External factors which influence decisions about pregnancy and when to become a parent [Lifetime Wellness Standards: Standards 6.2,6.3,6.4,6.5,6.11,6.12,6.13] Demonstrate the use of effective communication and negation skills about the use of contraception including abstinence and condoms [Lifetime Wellness Standards: Standards 6.7, 6.9] Decision making model to various sexual health decisions [Lifetime Wellness Standards: Standards 6.5, 6.3, 6.6, 6.9, 6.11, 6.12] Compare and contrast the advantages and disadvantages of abstinence and other contraceptive methods including condoms [Lifetime Wellness Standards: Standards 6.6, 6.8, 6.9] Access medically accurate information about contraceptive methods, including abstinence and condoms [Lifetime Wellness Standards: Standards 6.6.5, 6.6, 6.9] Apply a decision making model to choices about contraception including abstinence and condoms [Lifetime Wellness Standards: Standards 6.2, 6.5, 6.6, 6.9, 6.12, 6.13]

Appendix G: Family Life Education Policy Brief

Family Life Education Policy Brief

Executive Summary
The purpose of this policy brief is create awareness of the current rise in the teen pregnancy rates in Henry County and the need to change the current Family Life Education Policy to become more in line with evidence-based practice recommendations and standards regarding a comprehensive educational curriculum of our adolescents and youth. The current policy as stated is vague and leaves much uncertainty as to what can and cannot be covered with the educators of family life. It is the desire of the Coordinated School Health Department, Department of Nursing, School Counselors, and educators as well as other community stakeholders to change the current policy to one that supports a comprehensive educational program such as "Abstinence Centered/Based Plus Contraception".

Statement of the Issue
Henry County has a teen pregnancy rate of 32.0/1000 for 2012 for women ages 15-17, and has consistently risen for the past two years from 14.5/1000 for 2010 to 25.9/1000 for 2011 and despite the board approval and adoption of the Michigan Model for Health, which has a comprehensive evidence-based pregnancy prevention, healthy relationships, and HIV/AIDS/STDs prevention model.

Background
Risky sexual behaviors remain high among youth. The 2011 Youth Risk Behavior Survey (YRBS) for Tennessee demonstrated that 52.4% of high school students, grades 9-12, reported ever having had sex, 68.2% of high school seniors report having had sex with 25.2% report more than four partners. Regarding high school freshmen, 14-15 year olds, 37.1% reported having had sex and 8.1% report having four or more partners. In the 2009, the National YRBS demonstrated that 20% of 6th graders and 42% of 8th graders report having had sexual intercourse.

According to State Law Code 49-6-1301 if any districts teen pregnancy rate is above 19.5/ 1000 females then every LEA within such county shall locally devise, adopt and implement a program of family life instruction *in conformance with the curriculum guidelines established for such programs by the state board of education*."

The current Henry County Family Life Educational Policy is vague which leaves much uncertainty as to what can and cannot be covered regarding FLE. Additionally there is much uncertainty as to what and which components of the evidence-based Michigan Model for Health can be disseminated pertaining to the controversial topics due to the current vagueness of Henry County's Family Life Educational policy.

Research has repeatedly demonstrated that to decrease the teen pregnancy rate within communities and to change the negative behaviors of adolescents and teens that result in teen pregnancy, teen pregnancy prevention programs need to be "comprehensive". Comprehensive means that these prevention programs convey a two-part message. First that abstinence is the "GOLD STANDARD" behavior for teens in middle and high school because, among many other reasons, it is the only way to be 100% sure you will not get pregnant or cause a pregnancy to happen as well as being 100% effective from contracting STIs/HIV/AIDS. Secondly, IF, however, you do choose to have sex while still an unmarried teenager, you must use contraception and protect yourself from sexually transmitted infections every time you have intercourse, including the very first time. If organizations and communities choose not to do this, they need to understand that they **WILL NOT** be transmitting the most powerful message that is available, nor be utilizing and implementing what has been demonstrated time and time again to produce positive health behaviors and outcomes.

Organization's Interest in the Issue
Being that the teen pregnancy rate for Henry County has exceeded the denoted rate of 19.5/1000 and according to State Law Code 49-6-1301 if any districts teen pregnancy rate is above 19.5 per 1000 females, ages 15-17, then every LEA within such county shall locally devise, adopt and implement a program of family life instruction *in conformance with the curriculum guidelines established for such programs by the state board of education*." It is also felt by key organizational and community stakeholders that due to the further increase in pregnancies over the last 2 years, the teen pregnancy rate will continue to increase beyond the current 32.0 per 1000 females for ages 15-17.

It is not the wish of the key stakeholders to wait for the State Board of Education to delineate a Family Life Program that is in conformance with their curriculum guidelines. Furthermore, school counselors, nurses, and family life/wellness educators have expressed the need and desire to be able to educate on contraception at the appropriate ages. This can only be done if the current policy is changed to a comprehensive policy that allows for this type of instruction. It is always a

better option to be proactive rather than reactive which begins with the needed change regarding the educational policy that delineates these controversial topics more specifically to alleviate the current confusion experienced by the educators of family life instruction.

Policy Options
There are three policy formats that districts can chose to adopt for their Family Life Education Abstinence-Only, Abstinence-Centered, and Abstinence-Centered Plus Contraception.

- The Abstinence-Only policy teaches that abstinence is the only 100% effective method to prevent pregnancy, STDs, and HIV/AIDS. Although abstinence-only policy formats are mandated to teach about HIV/AIDs they do no instruct about the prevention and protection of other sexually transmitted diseases and pregnancy other than abstinence.

- Abstinence-Centered formats encompass abstinence only material as well as emphasizing that it is the best method for avoiding pregnancy, STIs, and HIV/AIDs. But it also includes the instruction of sexually transmitted diseases causes, symptoms, and treatment.

- Abstinence-Centered Plus encompasses all of the Abstinence-Only and Abstinence-Centered teachings, in addition to teaching about contraception and condom use for those that chose to be sexually active.

In order to decrease the teen pregnancy rates and the negative behaviors of our youth, research demonstrates that a comprehensive sexual education program needs to be instilled within the organization and the first step is adopting and implementing the needed policy change for appropriate and complete dissemination of the Michigan Model for Health. Attached is a copy of each of these formats and a comparison document that explains the differences between them, as well as a copy of the current Family Life Educational Policy.

Policy Recommendations
It is the desire of key organizational and community stakeholders that the Henry County School Board adopt the "*Abstinence-Centered Plus Contraception Format*" for Wellness and Family Life instruction within the Henry County School System.

Appendix H: Policy Implementation Plan

Task	Completion Target Date	Who is responsible for Completion
1. Assure that policy is in proper format and posted on Henry County School Systems Policy Website	Oct.. 2014	Assistant Director of Schools, CSH Director
2. Project team educated on new policy if there were any changes from proposed policy	Oct. 2014	Supervisors of Instruction, CSH Director
3. Project team leader to meet with County Administration and Supervisor of Instruction to determine educational information date and needed attendees for new policy education and practice guidelines at a Professional Development Day	Sept. 2014	CSH Director, Supervisor of Instruction
4. Educate organizational and community stakeholders (i.e. counselors, teachers, individual school administrators, nurses) on state law, new policy and practice guidelines as well as what can and cannot be taught for FLE in Tennessee.	Oct. 2014 & Jan 2014	Supervisor of Instruction, CSH Director
5. From this educational session: develop subcommittees for grades K-5, 6-8, 9-12 that will develop protocols, standards for policy implementation and plan for MMH implementation and evaluation for respective grades and topics per FLE policy, State Lifetime Wellness and Health Standards utilizing the MMH/TN State Standards Implementation and Evaluation Template.	Oct. 2014 & Jan. 2015	CSH Director
6. Project team subcommittees to develop protocols for school administrators and FLE educators to follow when guest speakers are ask to instruct on FLE topics.	Feb. 2015	Principals, CSH Director, Supervisor of Instruction.
7. Project team subcommittees to develop guest speaker informational packet regarding guidelines, Tennessee Sate Law, HC FLE Policy, Tennessee Health and Lifetime Wellness Standards in regards to FLE instruction.	Feb. 2015	CSH Director, Supervisor of Instruction, Subcommittee Chair
8. Administrators develop protocol for principals to follow when approving guest speakers to instruct on FLE policy.	March 2015	Director of Schools, Supervisor of Instruction, Principals
9. Subcommittees to develop parent informational letter pertaining to the new family life education policy changes and education for grades K-5, 6-8, and 9-12.	March 2015	CSH Director, Supervisor of Instruction
10. Subcommittees develop plan for individual school wide binders containing Family Life Education State Law and new policy and practice guidelines specific, and education specific to grades for easy parental access and review, when requested.	April. 2015	Principals, Supervisor of Instruction, CSH Director
11. Subcommittees develop plan for all schools to provide easy parental access for review of FLE curriculum at parent teacher conferences, and other school wide events.	April, 2015	CSH Director, Supervisor of Instruction, Subcommittee Chair

11. Subcommittees develops plan for an annual public hearing for parents and community members to share and express their opinion on FLE curriculum.	May 2015	CSH Director, Supervisor of Instruction, Subcommittee Chair
12. Project team to set and hold school wide informational meetings for community and organizational stakeholders discussing sex education policy, practice guidelines, allocated prevention program, and upcoming changes.	May & August 2015 (spring and fall of every school year)	CSH Directors, Counselors, FLE Educators
13. Subcommittees develop protocol for parents/principals who wish to excuse their children from FLE.	June 2015	CSH Director, Supervisor of Instruction, Subcommittee Chair
14. Subcommittees/Educators develop protocol for educators to follow for children that are excused from FLE and will require alternate health or wellness related assignments.	June, 2015	CSH Director, Supervisor of Instruction, Subcommittee Chair
15. Project team to provide documentation protocol for discussion of pregnancy options upon request for nurses, educators, counselors, and guest speakers to utilize.	July, 2015	CSH Director, Supervisor of Instruction, Subcommittee Chair
Further steps for project team subcommittees include: Larger Community Initiative not part of project.		
8. Utilizing the FLE Policy Practice guidelines and Michigan Model of Health implementation and evaluation templates, which correspond to the Health, Wellness, and Family Life Educational Standards for their respective grades, the subcommittees develop rollout plan for the MMH teen pregnancy prevention program.	Spring/Summer 2015	Supervisor of Instruction, CSH Director, Subcommittees Chair
9. Project team subcommittees set dates for roll-out of MMH.	Spring/summer 2015	Supervisor of Instruction, CSH Director, Subcommittee Chair.
10. Implementation of MMH for grades K-12	Fall 2015	Supervisor of Instruction, FLE instructors, CSH Instructors, Counselors, Nurses

Appendix I: Policy Evaluation Plan

Evaluation Task	When to complete	Who responsible	As measured by
Presentation of the devised FLE curriculum to the BOE for approval.	Annually in August or September BOE meetings	Supervisor of instruction	Documented BOE agenda, minutes filed with Supervisor of Instruction and given to CSH director for state reporting.
BOE devise, adopt, and implement program of FLE according to the guidelines established by the State BOE.	Annually in August or September BOE meetings.	Supervisor of instruction	Documented BOE agenda, minutes filed with Supervisor of Instruction and submitted to CSH Director for State reporting.
FLE curriculum instruction material assessment and evaluation tools include all material consistent with Comprehensive FLE programs, as denoted in State Health and Wellness Standards and HC BOE policy and practice guidelines including all forms of contraceptives.	Annual, in June and before and after each lesson.	Supervisor of Instruction CSH Director	Final lesson plans and evaluation documents turned in to supervisor of instruction and CSH Director for review and state reporting.
Instructors are qualified to teach FLE material-including guest speakers.	Annually in August	FLE instructors, Guest Speakers, Supervisor of Instruction, CSH Director	Instructors will submit annually FLE/Sex Education certification to supervisor of instruction. PDD agenda and attendance record filed with Supervisor of Instruction. FLE instructors who schedule guest speakers will turn in certification before speaking engagement to supervisor of instruction.
School nurses are bound by the same interactions with students regarding FLE instruction.	Annually in August	School Nurses, Director of Nursing, Supervisor of Instruction, CSH Director.	PDD agenda and attendance sheet showing all school nurses attend annual training.
Supervisors of Instruction shall be responsible for the Implementation and oversight of FLE in the HCSS.	Annually	Director of Schools, Board of Education	BOE agenda, meeting minutes entailing Supervisor of Instruction reporting of FLE Instruction, implementation and evaluation results for the previous year.
Contraceptives are taught in grades 7-12 annually as well as where to obtain contraceptives. Contraceptives will not be distributed on any school property and educated on TCA 49-6-1304 regarding what can and can not be taught in Tennessee Schools.	Annually	FLE instructors Supervisors of instruction	FLE instructors will turn in to supervisor of instruction annually contraceptive education lesson plan as well as evaluation documents and results. FLE-PDD agenda and attendance of where laws pertaining to FLE are reviewed.

Coordination of FLE educational efforts between, CSH, science teachers, FLE and wellness instructors, school counselors and nurses, community resource agencies and/or LEA principal for FLE upcoming year instruction.	Annually	CSH Director Supervisor of instruction	Annually, as measured by PDD schedule, meeting adgenda, minutes and attendance sheets.
Guest speakers comply with Tennessee health Education Standards, TCA and LEA policy when teaching FLE.	Annually and two months prior to speaking engagement	Supervisor of Instruction FLE instructors, counselors, principals who schedule guest speakers	Guest speaker agenda/lesson plan is turned into LEA principal and Supervisor of Instruction for review and approval.
Guest speakers approved by respective school principal.	Annually and two months prior to speaking engagement.	School principal, Supervisor of Instruction.	FLE educators and counselors must submit proposed guest speaker for approval. Principals submit approval to Supervisor of Instruction.
Comprehensive FLE instruction taught in lifetime wellness, health science, and family/consumer science classes following Lifetime Wellness Standard and course state standards complying with TCA and LEA policy when teaching FLE.	Annually	Supervisor of Instruction CSH Director	These educators turn in lesson plan and evaluation plan and results for FLE to supervisor of instruction and CSH Director for review before and after instruction of lesson.
HIV/AIDs Prevention Education is taught in every grade K-12.	Annually	Supervisor of Instruction	Educators will turn in lesson plans and evaluation plans and results regarding HIV/AIDs submit to Supervisor of Instruction prior to and after instruction.
Board shall conduct one public hearing pertaining to FLE in which the public will be given the opportunity to express their opinion regarding FLE.	Annually, in one of the Summer or Fall BOE meetings.	Supervisor of Instruction	Board Agenda, Meeting Minutes filed and copy given to Director of Schools.
Parents and guardians are provided a convenient opportunity to preview all materials used in teaching FLE units at least 30 days prior to the instruction.	Annually at every Parent Teacher Conference and through out year, and at least 30 days prior to instruction.	Supervisor of Instruction School Principals CSH Director	Document of material preview at Parent Teacher conference, throughout year in instructors classroom or counselors office. Attendance sign in sheet or record of for parents who previewed submitted to Director of Instruction.
Parents who wish to remove their child from any or all portions of FLE	Five days prior to instruction. Annually	Supervisor of Instruction	Principals to submit all parent letters to Director of Instruction.

instruction shall notify principal in writing.		School Principals	
Excused students shall be allowed to complete alternate health or wellness-related assignments.	During instruction of FLE. Annually.	FLE instructors, LEA principal, Director of Instruction	FLE instructors shall present alternative assignments to Director of Instruction.
Pregnancy options discussed upon request with emphasis on early prenatal care.	Annually and as needed.	FLE Instructors, school counselors and nurses, community resource agencies who are ask these questions while on HC school property.	Any discussion shall be documented and turned into director of Instruction.