

Facilitator Role in the Provision of Sexual Health Education for At-Risk High School Students

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Abstract

Objectives: The purpose of this study was to determine if the utilization of a facilitator's guide provided the facilitator with new teaching strategies, in addition to the knowledge and self-confidence needed to deliver the sexual health education curriculum to high school students. This project was part of a larger initiative to decrease infant mortality rates for an Ohio county.

Design and Sample: This project utilizes a one-group posttest design to examine usefulness of a facilitator guide to deliver the sexual health education curriculum. The posttest focuses on the following areas: delivery strategies, increased confidence in role, increased knowledge of content, guide expectations and recommendation of guide. Participants ($n=8$) were employees of the study city and county Health Department and potential facilitators of the sexual health education curriculum. **Results:** The mean of all survey statements ranged from a 4.14 minimum to a 4.88 maximum. Therefore, mean results ranged in the "agree" to "strongly agree" intervals and thus, support the aim and objective of the project. **Conclusions:** The utilization of a facilitator's guide equips facilitators with an in-depth knowledge of the content providing increased confidence in their role. The guide also presents new ideas for delivery strategies allowing facilitators to offer a seamless transition of knowledge to the students. The results of this research informed the continued efforts of the Ohio Equity Institute (OEI) and guided the revisions made to the sexual health facilitator guide.

Keywords: teaching methods, health education, health promotion, reproductive health, public health, infant mortality

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Background

Infant mortality is defined as, “the death of a baby before his or her first birthday.” Infant mortality continues to be a problem in the United States that has evaded the technological advances and medical sophistication of this country. The most current data reports the United States (U.S.) infant mortality rate at “5.96 per 1000 live births” (Centers for Disease Control and Prevention [CDC], 2016, para. 2; Matthews, MacDorman, & Thoma, 2015, p. 2). The *National Vital Statistics Reports* conclude the “U.S. ranked 26th for infant mortality among 29 countries monitored by the Organization for Economic Co-operation and Development (OECD) in 2010” (U.S. Department of Health and Human Services [DHHS], 2014, p. 2). Therefore, a mere three countries included in this data were ranked higher than the U.S., some of them lacking the economic, medical, and infrastructure resources available in the United States. More recent data shows a decline in the U.S. ranking to 32nd highest out of the 44 countries included in the OECD data (Organization for Economic Co-operation and Development [OECD], 2016). While at first glance seems favorable in recent years, the U.S. rate in 2013, was “comparable to Croatia, despite an almost three-fold difference in GDP per capita” (Chen, Oster, & Williams, 2015, p. 1).

Decreasing the Rate of Infant Mortality

The Office of Disease Prevention and Health Promotion (ODPHP) identifies decreasing the rate of fetal and infant deaths as one of the *Healthy People 2020* objectives (2016). According to the *National Vital Statistics Report*, compared to other states, Ohio has the twelfth highest number of infant deaths, with the study county among the top nine in rates of infant mortality compared to other Ohio counties, (Matthews et al., 2015). In 2016, Ohio’s IMR was 7.4%, while the study county held a rate of 9.0 infant deaths per 1,000 live births (Remy &

Boeshart, 2016). Non-Hispanic black infant deaths are more than twice the rate of non-Hispanic white infant deaths and even higher when compared to other races and ethnic origins (CDC, 2016; Ohio Institute for Equity in Birth Outcomes [OEI], 2014; Matthews et al., 2015). Not only is the study county among the highest counties in Ohio, but the study city as a whole holds an IMR of 10.9 per 1,000 live births which is significantly above the *Health People 2020* goal of less than or equal to 6.0 (CHD, 2016, ODH, 2016, Remy & Boeshart, 2016).

Many factors affect infant mortality. A national multi-faceted approach is necessary to decrease infant mortality and includes changes in knowledge, attitudes and behaviors of both males and females, empowered communities, health equity, and a commitment to prevention (Ely et al., 2017; Johnson et al., 2007). To have the greatest impact on the health of our nation, the CDC recommends programs that are two-fold and collaborative in nature for example programs that target the leading causes of infant mortality while simultaneously recognizing and decreasing health disparities among populations (2016). The leading causes of infant deaths in Ohio are low birthweight and very low birthweight, preterm births, sudden unexpected infant death syndrome (SUIDS), babies born with a serious defect, maternal complications before and during birth, and neonatal injuries. Risk factors associated with these leading causes include smoking, poverty, lack of education, under-resourced neighborhoods, poor nutrition and race (Ohio Department of Health [ODH], 2013).

To address high infant mortality rates in study city and reduce disparities in birth outcomes, the City Health Department has entered into a partnership with the Ohio Department of Health (ODH) and CityMatCH in a statewide alliance called the Ohio Equity Institute (OEI) to improve birth outcomes. The Ohio counties with the highest rates of infant mortality all participate in this initiative to strengthen the evidence-based focus to reduce the rate of infant

mortality. The goal of the partnership is to improve birth outcomes, decrease infant mortality, decrease disparities in health, and realize equity in health among all populations. The study city is one of nine urban communities in Ohio participating in this statewide strategy to reduce infant mortality.

Vital statistics data revealed significant social, racial, and county level inequalities among infant mortality rates in the study city (Matthews et al., 2015). Based on this information, the OEI Team made a data-driven decision to focus on the social determinants of health, and health inequities – one strategy focusing downstream and the other upstream. Within each county, multitudes of projects exist. The Health Department in the study city and the ODH gained Institutional Review Board (IRB) approval for the Upstream RISE (Reach Involve Support Empower) project. The Upstream RISE project was implemented based upon the premise that, “Until we see equity in housing, education, economics, and transportation, health disparities will continue to exist,” (OEI, 2014, p. 4). The Upstream RISE project addresses key principles of infant mortality through the collaboration of multidisciplinary stakeholders within the study city. One component of the Upstream RISE project is the *Know Your Choices* curriculum. The health education curriculum, known as *Know Your Choices* curriculum (formerly the Upstream RISE curriculum), consists of multiple health education sessions taught during regular school hours in the students’ health and wellness course.

The *Know Your Choices* curriculum targets 9th-12th graders in public high schools serving students who live in areas where infant mortality rates are the highest. The curriculum focuses on decreasing infant mortality rates through education on topics such as poverty, unemployment, sexual education, stressful social situations, and low educational attainment. The long-term goals of this project include ‘Movement toward financial equity thereby reducing poverty,

improved birth outcomes, and decreased infant mortality,' (Cincinnati Health Department [CHD], 2016, para. 2). The main objectives of the *Know Your Choices* curriculum, as defined by OEI (2016, slide 9) are to: 1. Support each student to create a Life Plan: long-term career/health/relationship goals and 2. Educate on healthy choices, healthy communication and relationships, and reproductive life planning.

After reviewing the data from the initial implementation of the *Know Your Choices* curriculum and personal communication with curriculum facilitators, the OEI team within the study city determined that program facilitators needed a more in-depth understanding of the topics discussed, in addition to more interactive strategies to deliver the content to the high school students.

Review of Literature

Facilitator and Facilitator Guide

The knowledge and delivery of curriculum topics from the facilitator to the high school student is essential to the acceptance and the impact of the curriculum. Facilitators play an intricate role in sparking beginning and continuing interest in such topics as poverty and reproductive health. This is especially important for high school students who may not have the opportunity to engage in healthy relationships and communication outside of the school setting. Consequently, it is imperative, facilitators possess an in-depth understanding of the *Know Your Choices* curriculum content (Greene-Clemons, 2016). Because of the multifactorial nature of infant mortality, facilitators must engage in a wide array of discussion topics such as poverty, unemployment, sexual education, stressful social situations, and low educational attainment. Topics such as sexual education can be difficult to discuss with high school students, highlighting the importance of the facilitator's knowledge and preparedness to teach such topics.

Facilitators must be equipped with in-depth knowledge on curriculum topics and have necessary tools to create a classroom environment conducive to learning.

A facilitator guide about the curriculum content and effective teaching strategies will assist in the delivery of consistent material. The guide will prepare facilitators with the knowledge and self-confidence to deliver sensitive topics such as sexual education to high school students. The facilitator must possess an in-depth understanding of the topics they teach to maximize student learning and adapt to their high school learners (Greene-Clemons, 2016). The topics discussed in the *Know Your Choices* sessions are essential to developing healthy relationships, preventing unplanned pregnancies and decreasing infant mortality rates. For example, preterm birth (PTB), low birth weight (LBW) and small for gestational age (SGA) babies are all risk factors for infant mortality. In a meta-analysis conducted by Donovan et al. (2016) results indicated that women who experienced intimate partner violence (IPV) during pregnancy are at increased risk of having a PTB, and an LBW or an SGA infant, leading to increased risk of infant mortality. Without the knowledge, attitudes and behavior to develop healthy communication and healthy relationships the risk for intimate partner violence (IPV) increases (Shah & Shah, 2010).

Development of the Facilitator Guide

The *Know Your Choices* facilitators are the individuals teaching the classes on the following topics: poverty, unemployment, unplanned pregnancy (sexual education), stressful life events / social situations, and low educational attainment. With the initial implementation of the curriculum, facilitators did not receive any formal training or guidance regarding the delivery of the curriculum, which includes sensitive topics such as sexual health and relationships. Facilitators received power point handouts with information to discuss with students. Lacking

were the objectives of the curriculum, ideas for interactive engagement, how to prepare, approach and answer questions about sensitive topics and activities to initiate parental or trusted adult involvement. Recognizing the impact of the facilitator role on student acceptance of the curriculum, led to development of a facilitator guide.

To begin the process, it was critical to solidify the content presented to the high school students in the identified areas. After exploring information about social disparities and their impact on infant mortality, curriculum topics were determined and lesson plans created for each topic. Lesson plan development explored utilization of multiple teaching styles to ensure engagement of all learners. Each lesson plan contains a power point for students, a power point for the facilitator -with key points and topics of discussion, an engaging activity to reinforce content discussed and a take home worksheet to complete with a trusted adult.

The facilitator guide project is an attempt to provide an effective and efficient resource that directly addresses the knowledge and issues related to delivery of the *Know Your Choices* curriculum to high school students. The guide increases the impact of the curriculum as it prepares the facilitator and ensures consistent, seamless delivery of the curriculum from intention to outcomes. The facilitator guide takes into consideration the makeup of the curriculum, associated goals, instructional strategies, the ability of both the student and facilitator, content impact on infant mortality, alignment of content with resources, equipment available and alternative strategies for time constraints. The facilitator guide for the *Know Your Choices* curriculum specifically addresses the issues of facilitator knowledge, delivery of content and session preparedness. The facilitator guide provides the facilitator with the knowledge and self-confidence needed to deliver the *Know Your Choices* curriculum content to the high school students. The knowledge and delivery of content is essential to the acceptance and the impact of

curriculum on the student as facilitators play an intricate role in sparking beginning and continuing interest in content throughout the program. This is especially important for students who may not have the opportunity to engage in healthy relationships and communication outside of the school setting. Consequently, it is imperative, curriculum facilitators develop a positive disposition toward and possess an in-depth understanding of the content themselves (Greene-Clemons, 2016). Because of the multifactorial nature of infant mortality, facilitators must engage in a wide array of discussion topics throughout the *Know Your Choices* curriculum. Facilitators must foster an environment of caring and respect as they are creating the gateway to further student interest and development in all areas vital to infant mortality. With the facilitator guide, facilitators are equipped with not only the content, but also resources to assist with classroom management and teaching strategies, allowing for the seamless transition of knowledge to the student.

Research has shown a link between poor birth outcomes and risks such as poverty, unemployment, unplanned pregnancy, social situations and low educational attainment, all topics discussed in the *Know Your Choices* curriculum (Boeshart, 2015; CDC, 2016; Johnson et al., 2007, Shah & Shah, 2010). Students learn despite the differences between the expert and novice facilitator, but learning is better, the knowledge more trustworthy and in greater depth when the facilitators are more prepared. (Borate, Prasad, & Borate, 2014).

Theoretical Framework

Adult Learning Theory

In 1968, Malcolm Knowles proposed a new label for the adult learner to separate it from pre-adult learning. Knowles created the adult learning theory which follows four primary principles applied to the *Know Your Choices* facilitator guide. The principles of the adult

learning theory are incorporated into the facilitator guide as follows: 1) the design ensures the information offered acknowledges the facilitator's experience, 2) is highly relevant to the facilitator role, 3) is problem-centered, and 4) is self-directed (Knowles, 1980). The guide provides curriculum facilitators with information that is a point-of-need and highly relevant to their task of curriculum knowledge and delivery as it helps facilitators be more effective in their practice and more responsive to the needs of the high school students. The guide allows facilitators to set their own learning goals and addresses the content that is useful to them, facilitating a self-directed learning process.

Purpose

The purpose of this project is to determine if the utilization of a facilitator's guide provides the facilitator with new teaching strategies, in addition to the knowledge and self-confidence needed to deliver the *Know Your Choices* curriculum to high school students. The knowledge gained from this project informed curricular decisions for future sexual health education programs and facilitator needs. In addition, the *Know Your Choices* health curriculum project has potential to become a template for other states to spur a national collective movement in making measureable reductions in birth outcome inequities.

Methods

Design and Sample

This study utilizes a one-group posttest design. Due to the specialized focus of the study a small sample ($n=8$) with a specific process and group of facilitators was utilized. Facilitator recruitment took place during a *Know Your Choices* curriculum meeting at the City Health Department. All participants were employees of the study city or county health department and potential facilitators of the *Know Your Choices* curriculum. The approved recruitment script

explained the research study, stating voluntary involvement. Participants voluntarily consented to participate in the study, review the facilitator guide and complete the survey. Participants understood they could decline to answer any question on the facilitator survey and could withdraw at any time during the study.

Measurements

The *Know Your Choices* facilitator guide provides the facilitator with a detailed overview of each curriculum lesson including facilitator materials, student materials, websites, classroom activities and discussion points to use when presenting the content to the high school students. The facilitator guide ensures consistency with the program content and delivery methods. Each facilitator reviewed the facilitator guide to determine the usefulness in assisting facilitators with the delivery of the *Know Your Choices* curriculum.

Intervention

Upon the participant's consent to join the study each facilitator reviewed the guide, at a location convenient to them, prior to implementation of the *Know Your Choices* curriculum in the classroom setting.

Analytic Strategy

Once review of the facilitator guide was complete and prior to classroom implementation, the participant completed the *Know Your Choices* facilitator paper/pencil survey. The survey consists of five statements responding to a five-point Likert scale and one open-ended question, allowing for any additional comments from the participant. The survey statements focused on the following areas: delivery strategies, increased confidence in role, increased knowledge of content, guide expectations and recommendation of guide. Table 1 represents survey statements and participant responses.

Results

The mean of all survey statements scaled from a 4.14 minimum to a 4.88 maximum, reflecting the “agree” to “strongly agree” intervals. Based on survey responses from project participants, the overall theme is positive and in support of utilizing the facilitator guide when implementing the *Know Your Choices* curriculum. In-depth descriptive statistics for survey questions are in Table 2 and a bar chart with survey statement averages (Figure 1). The one open-ended comment section provides additional feedback regarding future recommendations and changes to the facilitator guide. Comments from participants are reflective of the project objectives, including positive feedback about the classroom activities to enhance knowledge and participation, while comments also included the need to provide alternative curriculum options if the facilitator has limited time, in addition to more guidance provided for facilitators within each session as far as “need to know” and “nice to know” information.

Table 1

Survey Statements and Participant Responses

| Statement | Response | Scale | Number of Respondents (n=8) |
|--|---------------------------|-------|-----------------------------|
| The facilitator guide provided additional strategies and methods for delivering the content of the <i>Know Your Choices</i> Curriculum. (In the comments section below, please provide specific strategies you plan to use in the classroom) | Strongly Agree | 5 | 6 |
| | Agree | 4 | 2 |
| | Neither Agree or Disagree | 3 | 0 |
| | Disagree | 2 | 0 |
| | Strongly Disagree | 1 | 0 |
| I feel confident in applying the knowledge and skills gained from the facilitator guide to my role as a | Strongly Agree | 5 | 2 |
| | Agree | 4 | 4 |

| | | | |
|---|---------------------------|---|---|
| facilitator. Please rate your confidence as follows: (Strongly agree=extremely confident, strongly disagree=no confidence) | Neither Agree or Disagree | 3 | 1 |
| | Disagree | 2 | 0 |
| | Strongly Disagree | 1 | 0 |
| The facilitator guide provided me with knowledge and understanding of topic areas while increasing my comfort level in addressing the topic areas of the <i>Know Your Choices</i> Curriculum. | Strongly Agree | 5 | 6 |
| | Agree | 4 | 2 |
| | Neither Agree or Disagree | 3 | 0 |
| | Disagree | 2 | 0 |
| | Strongly Disagree | 1 | 0 |
| The facilitator guide covered everything I expected. (In the comments section below, please list topics you feel are necessary but were not covered in the facilitator guide) | Strongly Agree | 5 | 5 |
| | Agree | 4 | 3 |
| | Neither Agree or Disagree | 3 | 0 |
| | Disagree | 2 | 0 |
| | Strongly Disagree | 1 | 0 |
| I would recommend the facilitator guide to other facilitators. | Strongly Agree | 5 | 7 |
| | Agree | 4 | 1 |
| | Neither Agree or Disagree | 3 | 0 |
| | Disagree | 2 | 0 |
| | Strongly Disagree | 1 | 0 |

Table 2

Descriptive Statistics for Know Your Choices Facilitator Survey

| Question | Mean | Standard Deviation | Variance |
|--|------|--------------------|----------|
| The facilitator guide provided additional strategies and methods for delivering the content of the <i>Know Your Choices</i> Curriculum | 4.75 | .463 | .214 |
| I feel confident in applying the knowledge and skills gained from the facilitator guide to my role as a facilitator. Please rate your confidence as follows: (<i>Strongly agree</i> =extremely confident, <i>strongly disagree</i> = no confidence) | 4.14 | .690 | .476 |
| The facilitator guide provided me with knowledge and understanding of topic areas while increasing my comfort level in addressing the topic areas of the <i>Know Your Choices</i> Curriculum. | 4.75 | .463 | .214 |
| The facilitator guide covered everything I expected. (In the comments section below, please list topics you feel are necessary but were not covered in the facilitator guide) | 4.63 | .518 | .268 |
| I would recommend the facilitator guide to other facilitators. | 4.88 | .354 | .125 |

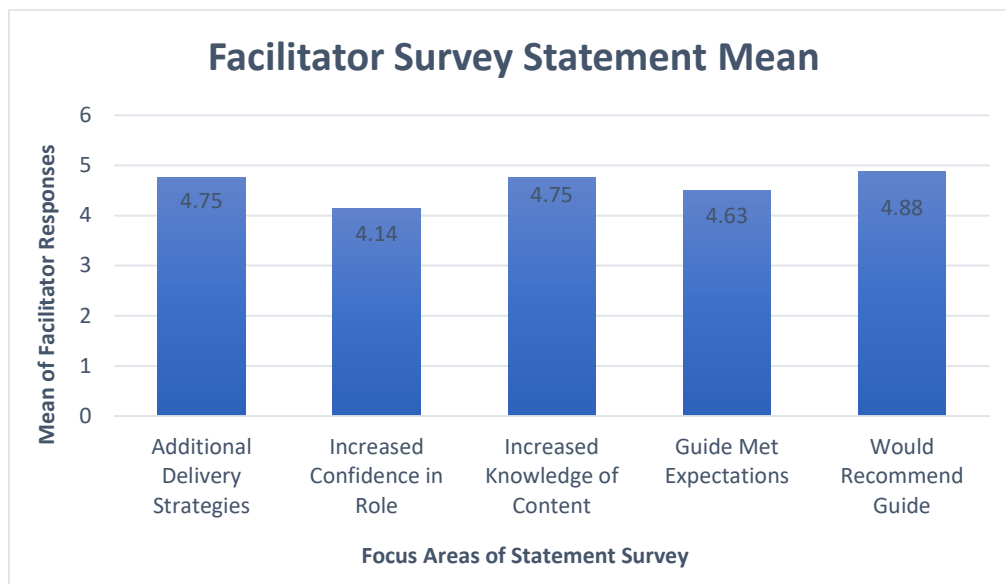


Figure 1. Survey Statement Mean

Discussion

Relationship of Results to Framework, Aims and Objectives

The facilitator guide demonstrates collaboration with the adult learning theory. The principles of the adult learning theory are incorporated into the facilitator guide as follows: 1) the design ensures the information offered acknowledges the facilitator's experience, 2) is highly relevant to the facilitator role, 3) is problem-centered, and 4) is self-directed (Knowles, 1980). The guide provides curriculum facilitators information that is point-of-need and highly relevant to their task of curriculum knowledge and delivery as it helps facilitators be more effective in their practice and more responsive to the needs of the high school students. The guide allows facilitators to set their own learning goals, addressing the content that is useful to them, facilitating a self-directed learning process (Merriam, 2001).

The mean of all survey statements ranged from a 4.14 minimum to a 4.88 maximum. Therefore, mean results range in the "agree" to "strongly agree" intervals and thus, support the aim and objective of the project that the utilization of a facilitator guide provided the facilitator with new teaching strategies, in addition to the knowledge and self-confidence needed to deliver the *Know Your Choices* curriculum to high school students.

Strengths and Limitations

This project has a specialized focus; requiring a small sample size (8), with a specific process and group of facilitators. The small sample size makes it difficult to generalize results. Although the survey utilizes closed-end statements, respondents are not limited in options as an *additional comments section* provides an increase to the scope of questions. The project was able to capture a snapshot of facilitator needs and informed changes for future facilitator guide development.

Recommendations and Implications for Future Practice

Based on survey responses from project participants, the overall theme was positive and supportive of the use of the facilitator guide when implementing the *Know Your Choices* Curriculum. . Recommendations and implications for future practice are central to sustainability and portability of the curriculum. Collaboration and discussion about recommendations and implications for sustainability with the senior epidemiologist for the study city, the Reproductive Health and Wellness Project Director and the OEI coordinator, led to the decision to pursue an alternative format option for the facilitator guide. Recommendations include the development of an online facilitator guide to eliminate the face-to-face formal instruction while improving access and incorporation of an online tutorial to assist with transition of the content from the guide to the classroom.

The online facilitator guide project makes the link between research and practice through the innovative use of technology and facilitator involvement throughout the project. Education and training are a prerequisite for a fully functioning “knowledge triangle” education – research – training, (Suhayda & Miller, 2006). The overall aim of the proposed project is to establish a framework and e-resources to support facilitators in overcoming the challenges of time and space for gaining resources necessary for engaging high school students in the *Know Your Choices* curriculum.

Online tutorials and e-learning modules allow convenience and flexibility while meeting the needs of facilitators. With an in-depth understanding of the content in the areas they teach, the facilitator has the ability to maximize student learning as well as understand and adapt to their learners (Greene-Clemons, 2016). Without foundational knowledge, novice facilitators spend much of their time learning required content or trying to create appropriate ways to teach

the content. Through online tutorials, facilitators are equipped with not only the content, but also interactive modules to assist with classroom management and teaching strategies.

Evaluation and quality improvement activities of the online facilitator guide will occur through assessment of module competency scores and an online facilitator survey. Data collection will be two-fold as it looks at successful completion (a score of 75% or better) of the online competency modules and the facilitator feedback from the survey about the impact of the online tutorials. Similar to the original facilitator survey, the online facilitator survey focuses on the following areas: delivery strategies, increased confidence in role, increased knowledge of content, guide expectations and recommendation of guide. The project coordinator will complete the appraisal of the data and share it with the OEI team. Through appraisal of data, stakeholders can proactively evaluate the online facilitator's guide to inform decision-making, in addition to retroactively evaluate decisions and future interventions.

Impact of Results on Practice

Know Your Choices Curriculum

The interplay of risk and protective factors influence health throughout one's lifetime. Such factors as socioeconomic status, environmental exposures, health behaviors, stress, and nutrition play a central role in birth outcomes. The *Know Your Choices* curriculum empowers and educates the youth among vulnerable populations and may decrease social inequities and disparities, resulting in a decreased infant mortality rate.

Facilitator Guide

The knowledge and delivery of the *Know Your Choices* curriculum content is essential to the acceptance and the impact of curriculum on the student. Facilitators function as a key player in sparking beginning and continuing interest in content throughout the program. The

development and utilization of the *Know Your Choices* facilitator guide is significant to the delivery of the curriculum and its impact on the student population. The guide ensures consistency in information and delivery of curriculum topics to the high school student. Implementation of the facilitator guide allows the facilitator to develop a more in-depth understanding of the topics to be addressed to assist the high school student create a life plan about career, health and relationship goals. Consistent, competent facilitator delivery of the *Know Your Choices* curriculum influences lives, as teens gain the knowledge and resources to make informed decisions.

Sustainability

The *Know Your Choices* curriculum project is one component of a national effort to improve birth outcomes and reduce racial disparities in infant deaths. Currently presented during the Health and Wellness course in ten public high schools, permanent integration of the *Know Your Choices* curriculum in all high schools within the study city is a long-term goal of the project. CityMatCH, a national membership organization that supports urban maternal and child health efforts at the local level, subsidizes the OEI grant that provides financial sustainability for the *Know Your Choices* curriculum project. OEI grant eligibility is a formalized reapplication process every three years.

Conclusion

The *Know Your Choices* curriculum creates primary efforts to combat infant mortality at the local level. Empowerment through education of vulnerable youth is key to positive change. *The Know Your Choices* facilitator guide enables facilitators to practice and refine skills through the guidance of professional interventions, creating a trusted classroom environment resulting in achievement of project outcomes. Substantial financial resources are needed to solve the problem

of infant mortality, but money alone is not sufficient. Governmental agencies, in addition to community-based organizations, must provide influential leadership within their capacity to effect meaningful change in communities. Continued collaboration of stakeholders will increase the visibility of public health in the community, while strengthening the public health infrastructure, leading to the community's ability to anticipate and manage change (OCMH, 2015). The *Know Your Choices* curriculum and facilitator guide demonstrate the multi-sectoral response and collaborative effort by diverse partners in the community to improve population health by creating a foundational platform to combat the complex, system wide issue of rising infant mortality rates.

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